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Teaching Presence and Intellectual Climate in a Structured Online Learning Environment

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Teaching Presence and Intellectual Climate
in a Structured Online Learning Environment

by

Janice M. Orcutt

A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
in
Computing Technology in Education

College of Engineering and Computing
Nova Southeastern University

2016
We hereby certify that this dissertation, submitted by Janice Orcutt, conforms to acceptable standards and is fully adequate in scope and quality to fulfill the dissertation requirements for the degree of Doctor of Philosophy.

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Teaching presence and its implications for the intellectual climate of an online classroom cannot be fully understood unless explored from the perspective of the instructors who experience it. Framed in the theoretical perspective of the Community of Inquiry (CoI) model, this collective case study investigated the actions, intentions and perceptions of instructors with the intent of developing an in-depth understanding of the phenomenon of teaching presence as it was established in a structured online learning environment.

The experiences of selected successful instructors in this specific online context were explored to gain insight on how pedagogical choices influenced the establishment of an intellectual climate appropriate to the courses taught. Using semi-structured interviews as the main source of data, the study utilized the Interpretative Phenomenological Analysis (IPA) method as an analytical tool to address concerns of rigor in the qualitative interpretation of experiential data.

It was the goal of this study to gain an understanding of how teaching presence is established and the decision processes employed in doing so in order to make a contribution to the body of knowledge from a practical pedagogical perspective. Findings of the study provided insight into the following:

**Practices in Establishing Teaching Presence.** Within the temporal context of course delivery, the study identified four phases of delivery that served to reference the sequence of activities undertaken by instructors when establishing their presence in the online classroom. Primary actions for each phase emerged from the analysis.

**Intentions of Instructors.** The analysis of the collective case identified three primary recurrent themes associated with the intentions of instructors: (a) to ensure engagement and interaction that supported learning, (b) to connect with students in authentic ways, and (c) to serve as a resource to share experience and knowledge that guided learning.

**Influence on Intellectual Climate.** The analysis of the collective case revealed that by setting and reinforcing expectations for performance and participation, instructors established an academic tone most often by modeling scholarly behaviors and ensuring availability for support and assistance, thereby supporting their intention of creating engagement and interaction that supported learning.
**Nature of Teaching Presence.** In the collective case, teaching presence was defined or perceived in terms of responsiveness to students’ needs and expectations. This interpretation is consistent with students’ evaluations with respect to instructors demonstrating a student-centered approach. Although in the Community of Inquiry (CoI) model teaching presence is defined in terms of facilitation of discourse and direct instruction, this interpretation reflects the close relationship teaching presence has with social presence while it is being established in the online classroom.

Overall, the collective case revealed that an active interest and passion for teaching and an understanding of relevance to the student encouraged student engagement, and inspired intellectual curiosity and a shared responsibility for the learning process. The findings show that the common goal of learning shared by instructor and student had its foundations in the creation of authentic relationships between instructor and students that extend beyond stated learning objectives and expected outcomes.

The results of this study contribute to knowledge related to the nature of teaching presence and its role in setting an academic climate, addressing the overarching question of the study about how instructors establish teaching presence and inspire intellectual curiosity within the courses they teach. In addition, the experiences of the selected instructors helped provide a vocabulary with which to describe the shared pedagogies of instructors and served to catalog commonalities in actions and intent associated with setting an intellectual climate that met the requirements of academic rigor appropriate to the courses they taught.
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Of course this research could not have been completed without the cooperation and contributions made by those who were my research subjects. I was truly blessed to have them as members of faculty working with me, and even more appreciative of their willingness to participate and share their experiences, insights and perspectives.

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Chapter 1

Introduction

Background

Graduate education requires students to think critically, synthesize and apply knowledge, and communicate within the intellectual community (Bowden, 2012; Schindler & Burkholder, 2014). Students are guided through this inquiry-based process of higher order learning by instructors who provide intellectual and scholarly leadership by sharing their knowledge, experience, and insights as subject matter experts (Arbaugh, 2013; Kyei-Blankson, Ntuli, & Donnelly, 2016). As a result, online graduate education programs have primarily relied on the instructor to maintain the quality of instruction and ensure achievement of expected learning outcomes (Ekmekci, 2013).

The instructor sets the academic tone which elicits the scholarly climate necessary for critical discourse, reflective thinking, and social involvement (Bowden, 2012; Kanuka, Rourke, & Laflamme, 2007; Schindler & Burkholder, 2014). The intellectual expectation of a course is conveyed by the instructor when establishing a teaching presence which invites interaction among class participants commensurate with the academic rigor required for the course (Afolabi, 2016; Arbaugh, 2010; Arbaugh & Hwang, 2006; Ekmekci, 2013). Teaching presence is 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 (Afolabi, 2016; Arbaugh & Hwang, 2006).

Online discussions are most often used as a strategy for this interaction, enabling students to receive guidance and feedback from their instructors while they become critically informed on the subject matter within the course and share the responsibility for their own learning (Stein & Wanstreet, 2013; Williams et al., 2016). It is often in the asynchronous discussion forums where students collaboratively build knowledge with their peers while participating in meaningful inquiry-based learning activities (Bangert, 2008; Dreon, 2016). Students develop skills in reasoning, critical thinking, and problem solving through the interaction which takes place during this collaboration. The facilitation of this intellectual discourse by an instructor is a primary component of teaching which reveals to students differences in interpretations, alternative perspectives and understandings, and even misconceptions, thereby allowing students to derive personal learning from the shared experience (Garrison & Akyol, 2013; Tsiotakis & Jimoyiannis, 2016).

Through interaction with students, an online instructor is a present resource that directs and develops insight and understanding of the course topics (Anderson, 2004; Shea & Bidjerano, 2009; Williams et al., 2016). During instructor-led exploration of course topics, it is vital that the instructor facilitates activities that help students coalesce as a group, synthesize information presented from the many perspectives of group members and move toward shared understanding (Stein & Wanstreet, 2013). Setting the appropriate intellectual climate is integral to the development of the skills necessary for
achieving higher order learning and is an important intermediary step in the learning process performed by the instructor (Brock & Abel, 2012; Kaufmann, Sellnow, & Frisby, 2015; Ravenna, 2012).

Anderson and Dron (2011) posited that in constructivist environments, it is this learner-learner interaction facilitated by the instructor that influences the learning process. They suggested that the active engagement of students is greatly dependent on the instructor establishing a climate of open communication and inquiry. In a study of pre-service teachers faced with the opportunity to teach online, participants noted that the first concerning challenge they encountered was how to establish a climate that was productive and efficient (Duncan & Barnett, 2010). The course climate created by an instructor influences the way students learn and the extent to which collaboration is promoted (Cox-Davenport, 2014; Kaufmann et al., 2015). Garrison, Cleveland-Innes, and Fung (2010) suggested that this link between teaching presence and learning depends on the role the instructor’s presence plays in establishing and facilitating a climate for discourse and collaboration. In his qualitative evaluation of discourse in graduate level courses, Bowden (2012) found that the instructor’s role was as critical to ensuring students adhered to the topic, kept focused, and contributed to shared knowledge building, as it was to setting academic expectations.

Instructors can create an academic climate that increases connectedness with students and expectation of scholarship by promoting a shared sense of teaching presence (Afolabi, 2016; Ekmekci, 2013). Stein, Wanstreet, Slagle, Trinko and Lutz (2013) advocated instructors adopt coaching techniques to empower students with responsibility for shared learning through student-led discussions, offering evidence of increased higher
order learning as a result. Ekmekci (2013) suggested that by utilizing peer-based
techniques drawn from experiential, case-based and problem-based learning, instructors
can positively influence the academic climate of their online classroom. Shared cognitive
experiences contribute to construction of personal meaning for a participant, but also
facilitate the learning of other participants (Garrison & Akyol, 2013). As a result,
teaching presence becomes a shared responsibility of both instructor and students, with
student participation being highly influenced by the instructor’s actions (Akyol &
Garrison, 2011; Yang, Quadir, Chen, & Miao, 2016). This shared agency in the learning
process is an integration of teaching and cognitive development which leads students
through the process of critical inquiry (Garrison & Akyol, 2013; Tsiotakis & Jimoiyannis,
2016).

Although teaching presence may be a shared responsibility, the presence of an
instructor greatly influences the success of the online learning experience (Garrison &
Arbaugh, 2007; Kyei-Blankson et al., 2016). The sense of “being there” or “being
together” is experienced in different ways in the online classroom and must be
intentionally created for it to be perceived and felt (Lehman & Conceição, 2010).
Lehman and Conceição suggested that this sense of presence relies as much on the
intentional planning, design, and involvement of the instructor as it does on the
awareness and engagement of the student. This suggestion was consistent with student
expectations in a study conducted by Paechter, Maier, and Macher (2010) in which
students identified interaction between the instructor and student as being the primary
factor contributing to their learning and the construction of knowledge.
An instructor’s goal is to contribute to a student’s learning not only through the content presented within the courses taught, but to ensure the skills to learn are also developed through the activities of critical thinking and inquiry. The improvement of the practice of teaching with respect to these goals is a continuous pursuit for instructors who are concerned with the results of their efforts in the changing environment of the online classroom (Junk, Derringer, & Junk, 2011). Shea, Vickers, and Hayes (2010) recognized the importance of advancing the practice of teaching in the online environment through the systematic exploration of pedagogies employed by instructors, and recommended further study into the intentional efforts of instructors in establishing their teaching presence. However, many teachers are challenged with finding suitable approaches to teaching in virtual environments because many did not learn that way themselves (Niess & Gillow-Wiles, 2013). The tendency shown by instructors when teaching in online environments is to rely on traditional classroom-based practices, emulating what have been perceived as effective approaches in face-to-face practice (Baran, Correia, & Thompson, 2013; Dreon, 2016). Baran et al. (2013) suggested that if a distinct pedagogy of online learning was to emerge, the presence of the online teacher, the transformation of the practices they engage in, and the competencies required to perform the tasks of the instructor must be explored.

Instructors are the key to the transformation from the physical to the virtual environment and it is critical to gain their perspectives on decisions made, strategies implemented, and practices employed during the learning process (Baran, Correia, & Thompson, 2011; March & Lee, 2016). Quality instruction needs to be defined from the perspective of experienced instructors; incorporating their perspectives can shape the
improvements of faculty development programs used to prepare instructors to be successful online (Bigatel, Ragan, Kennan, May & Redmond, 2012; Kidder, 2015). However, it is premature to evaluate the effectiveness of pedagogies that build and sustain learning before gaining adequate insight into the intentions and choices made by instructors while establishing their teaching presence, as suggested by Shea et al. (2010).

Brock and Abel (2012) identified that the instructors’ actions, specifically that of conveying a challenge to students, was a significant element in encouraging scholarship and creating a learning climate; however, the recognition of the role the instructor plays in setting the climate has largely gone unstudied (Kaufmann et al., 2015). While these studies have recognized the importance of the learning climate and its influence on student learning, Cox-Davenport’s (2010) exploratory research on how instructors used teaching presence to establish social presence and its influence on the social climate of a course appears to be unique in its investigation. This study, however, fell short of linking the instructors’ actions and teaching presence with the creation of the type of intellectual climate which enables the collaborative or independent progress toward knowledge construction.

**Problem Statement and Goals**

The addressable problem of this study was the need to understand the nature of teaching presence from an instructor’s perspective and the implications of this on establishing an intellectual climate in the online classroom. The goals of this study were to utilize the experiences of instructors to:
1. Catalog effective practices instructors employed with respect to establishing teaching presence within the classes they taught online;

2. Understand why those practices were utilized;

3. Describe how the practices were implemented; and

4. Identify any implications these practices had for setting the intellectual climate of the courses they taught.

Through their descriptions, the participants revealed what teaching presence meant to them and the processes they adopted to establish their presence in their online classrooms. Teaching presence has been investigated over the past decade primarily as a construct in online education studies associated with the Community of Inquiry (CoI) framework. This theoretical model introduced by Garrison, Anderson and Archer (1999) provides a conceptual framework for studying the online learning experience. Research related to teaching presence has had a primary focus of verifying the existence of the construct through text analysis of interactions (Garrison & Arbaugh, 2007). However, the empirical information gathered from these studies had not provided a full understanding of the experience of online instructors (Shea et al., 2010; Kidder, 2015) nor had it provided substantial guidance to instructors on how to effectively create a teaching presence that establishes a productive and efficient course climate (Duncan & Barnett, 2010).

The study expanded upon three previous investigations of the experiences of online instructors conducted between 2006 and 2013. The first study, a phenomenological study of the online teaching experience conducted by Conceição (2006), explored the meaning of the experience for instructors when there was an absence
of physical presence. While practical implications were discussed, no substantial pedagogical recommendations were made by the researcher due to the nature of the study. However, the findings of Conceição’s study showed that new dimensions of teaching practices were presented by the online experience, including the length and depth of engagement with students and the feelings of professional reward as knowledge construction became a shared activity within the learning community.

The second study, published by Baran et al. (2013), was a qualitative multiple-case study examining the practices of six exemplary instructors in a large research university as they transitioned to online teaching. Utilizing ethnographic interviews of instructors and semi-structured interviews of administrators, the authors evaluated commonalities and divergences in successful teaching practices in a decentralized institution where the instructors had freedom in selecting and designing their own technological environments. It was suggested by the authors that additional focused studies in different online teaching contexts could deepen the understanding of online teaching practices and the changing role of instructors, specifically with respect to how instructors created their online persona, or presence.

The third study, dissertation research conducted by Cox-Davenport (2010), utilized a grounded theory approach to gain insight on instructors’ understanding of course climate and how it influenced the way students learn. Citing linkages between teaching presence and social presence, Cox-Davenport explored instructor strategies and teaching practices and their influence on the creation of a social climate in the online classroom. She found that an instructor’s perceptions and practices highly influenced the creation of a climate that promoted open and honest communication and collaboration,
supporting a successful learning environment. She attributed the utilization of humanizing factors as the primary pattern associated with establishing and sustaining the social presence needed to maintain student engagement.

Using these three studies as a foundation to address the identified problem and meet the stated goals, the researcher conducted a collective case study to explore the phenomenon of teaching presence through an interpretive lens (Creswell, 2013). Through this study, the researcher sought to qualitatively assess 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 (Cox-Davenport, 2010; Duncan & Barnett, 2010). It was hoped that themes that emerged from the detailed examination and analysis of the experiences of the selected instructors when establishing teaching presence in a structured course environment would provide a vocabulary with which to describe the shared pedagogies of instructors and serve to catalog commonalities in actions and intent associated with setting an intellectual climate that met the requirements of academic rigor appropriate to the courses they taught (Garrison & Arbaugh, 2007; Shea et al., 2010).

The study utilized the teaching environment of a selected university where classes are delivered in an online environment typical of for-profit institutions, whereby course materials and learning activities follow a standardized delivery pattern independent of course content. This course environment creates a common context across all instructors in which the actions, intentions and choices of selected instructors can be isolated and examined. Using replication logic in the selection of sample cases allowed for
representation of a homogeneous type of instructor (Yin, 2014), therefore categorizing this type of study as a collective case study rather than a multiple-case study (Stake, 1995).

In this collective case, instructors recognized as successful at contributing to student learning were asked to provide insight on how they established teaching presence and to reflect on their intentions and perceptions related to their presence in the online classroom (Baran et al., 2013; Conceição, 2006). A focused examination of experiences of instructors in a specific consistent setting, such as that offered by the research site, assisted in the recognition of common actions taken while establishing presence from a temporal perspective and provided an understanding of the intentions behind those actions. The results of this examination have implications for the improvement of faculty development programs used to prepare instructors to teach online (Bigatel et al., 2012, Duncan & Barnett, 2010; Kidder, 2015). As suggested by Shea et al. (2010), this exploration allowed for discovery of how the intentional efforts of these instructors may be linked to the intellectual climate of their classes and its influences on the learning process which enabled the collaborative or independent progress toward knowledge construction.

In the standardized delivery format of the research site, all eight-week courses were designed within four two-week teaching modules. Each module started on Saturday and ended on the second Friday, and consisted of the same course components. Table 1 identifies the module schedule and course components. All course activities were pre-developed by a course committee composed of instructors with industry expertise. Instructors were expected to follow the format without deviation and were not allowed to
change assignments or content without approval of the committee. However, it was through the interviews about the approaches to establishing presence in the confines of this structure the researcher discovered what these instructors perceived as important in conveying to their students.

Table 1

Course Components and Module Schedule

<table>
<thead>
<tr>
<th>Module Week</th>
<th>Day</th>
<th>Course Component / Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Saturday</td>
<td>Reading Assignments; Lecture Slides; Homework Assigned; Project Assigned; Discussion Threads (2 Topics) Open; Open Forum Open (non-graded postings)</td>
</tr>
<tr>
<td></td>
<td>Saturday - Friday</td>
<td>Discussion Thread (2 Topics) Postings;</td>
</tr>
<tr>
<td></td>
<td>Tuesday - Thursday</td>
<td>1 – Hour Chat Room Scheduled (one night selected)</td>
</tr>
<tr>
<td>Week 2</td>
<td>Saturday</td>
<td>Homework Assignment Due; 2 Hour Live SyncSession (Whiteboard)</td>
</tr>
<tr>
<td></td>
<td>Saturday - Friday</td>
<td>Discussion Thread (2 Topics) Postings;</td>
</tr>
<tr>
<td></td>
<td>Tuesday - Thursday</td>
<td>1 – Hour Chat Room Scheduled (one night selected)</td>
</tr>
<tr>
<td></td>
<td>Friday</td>
<td>Project Assignment Due; Discussion Threads Closed Open Forum Closed</td>
</tr>
</tbody>
</table>

Research Questions

Conceptual questions drawn from the circumstances of the case studied helped shape the curiosity of the researcher (Stake, 1995). In particular, the variation in student reports of instructor contribution to learning created an interest in understanding differences in instructional practices within an otherwise tightly constrained online environment. At the research site, instructors adhered to a structured approach to course delivery whereby course design included the same components (e.g., lecture slides, discussion questions, homework assignments, research projects, and synchronous
“whiteboard” sessions) following a predefined schedule each term. Analysis of faculty evaluations revealed differences in student responses associated with the construct of teaching presence such as facilitating discussions and timely and regular feedback. This led to the formulation of a central question that created a conceptual structure for organizing the study of this case (Stake, 1995):

- RQ1: In a structured online environment, how do instructors establish teaching presence and inspire intellectual curiosity within the courses they teach?

This conceptual question is expanded to incorporate the instructor’s point of view, using sub-questions that highlight specific areas addressing the goals of this study:

- RQ2: In a structured online environment, what practices do instructors choose to employ when establishing teaching presence?
- RQ3: In a structured online environment, what are the intentions of instructors when determining which strategies will best help them establish teaching presence?
- RQ4: In a structured online environment, how do instructors perceive their decisions and practices relative to teaching presence and its influence on the intellectual climate in the classroom?

**Rationale and Need for this Study**

**Stance of the Researcher**

The subject of interest, teaching presence, was introduced to the researcher during her coursework as a doctoral student and resonated due to the researcher’s professional
background. The construct of teaching presence and its influence on cognitive development, as described in the Community of Inquiry (CoI) model, seemed logical to her as an instructor and described what was aspired to as a teacher. As someone involved in online technologies since the late 1970s in her professional career, the researcher was readily attracted to online teaching and course design in the late 1990s. Having already adapted to electronic communication as a standard means to transcend distance in business interactions, the researcher entered online education with little understanding of the variability in instructor interaction many students experience in online classes.

When changing careers to become an academic administrator, however, the researcher became aware of the great variability of instructor interaction when she started reviewing performance of faculty within the institution she worked. As the academic administrator for a newly established online graduate school seeking accreditation, it was necessary to provide evidence that student learning was occurring and to schedule faculty development activities that would enhance outcomes achievement. From student evaluation results, it became apparent that some instructors were considered more effective at contributing to a student’s perceived level of learning than others. Quantitative measures alone could not provide insight into what was occurring within the online classroom. As a result, the question of what made some instructors more successful inspired a curiosity with respect to what the instructors were doing differently and if it was related to their level of presence within their course environments.

Working within a for-profit academic environment, program delivery and structure requires consistency as a means to maintain cost effectiveness. It is necessary to understand the pedagogical choices that are valued by students in order to maintain
retention as much as to improve faculty training and development. However, as an academic researcher, it was of greater interest to discover how these instructors establish a presence and inspire intellectual curiosity within their courses when they are seemingly constrained in so many ways by the highly standardized delivery model. For example, in the course environment, instructors were required to conduct a synchronous session at specified timeframes, utilize pre-designed course assignments, and facilitate discussions that were prescribed by the course committee. Yet, even with this defined structure, individual instructors were identified as exceptionally involved by students and applauded for their contribution to their learning over others.

The researcher in a case study acts as the data collection instrument and interpreter, having a direct role in interacting with the study subjects (Stake, 1995). Qualitative research such as this relies on an interpretive approach to discovering meanings of phenomena as they occur in natural settings and a process of collection that is sensitive to the people and places being studied (Creswell, 2013). The experiences described above created some predisposition on the part of the researcher to the concept that the instructor possessed, or should possess, the intention of setting an academic climate that met the requirements of the programs offered. Because the experience of the researcher was similar to the participants of the study and the study relied on in-depth interviews as a primary source of data collection, the researcher recognized that she was engaged in a double hermeneutic (Smith, Flowers, & Larkin, 2009). It was important that the researcher did not allow her own preconceptions or experiences to distort the understanding of the participants’ feelings and perceptions of their experiences as she interpreted what the participant was describing about their experiences (Creswell, 2013).
The researcher presumed that her online teaching background favorably impacted the intersubjectivity that occurred in the study, as it allowed her to understand and relate to the experiences the interviewees disclosed. However, she also understood the importance of setting aside her personal viewpoints during the data collection and analysis process (Smith et al., 2009). As a result, she utilized strategies and practices such as journaling for bracketing preconceptions during the research process.

**Relevance and Significance**

Online education has become an integral part of most academic programs, as higher education has embraced it as a means of meeting the needs of diverse groups of students (Baran et al., 2013; Dreon, 2016; Roby, Ashe, Singh, & Clark, 2013). The evolution of the online technologies supporting these educational platforms has enabled interaction among instructors and students to shift from individual approaches to forms of collaborative learning (Garrison & Akyol, 2013). As this transformation has taken place technologically, the importance of teaching presence and its influence on the learning process has increased in visibility (Arbaugh, 2013). However, as the online teaching environment has advanced, teachers have not always kept pace, showing a tendency to either rely too heavily on technology to form connections with their students or to revert to conventional practices that are more suitable for physical classrooms (Baran et al., 2011, 2013; Cho & Kim, 2013; Ekmekci, 2013; March & Lee, 2016).

Friesen (2009) contended that in order to improve online learning, we must first understand the realities of the virtual environment through the eyes of successful and experienced instructors. A review of literature to date by the researcher exposed a gap in
the exploration of first-hand experiences, intentions, and choices of instructors regarding the establishment of teaching presence. This gap provided an opportunity to examine teaching presence from a practical pedagogical perspective, a suggestion made by Garrison and Arbaugh (2007) and later by Shea et al. (2010). Pedagogical suggestions by researchers over the past decade as reported by Junk et al. (2011) typically rely on conventional practices of interaction, such as participating in discussions or holding online office hours, in the attempt to engage students as a means to achieve the expected learning outcomes. Shea et al. (2010) suggested the importance of investigating the intentional efforts instructors undertake in establishing teaching presence, particularly when and where they focus effort, in order to understand its significance to the practitioner. At the time this research was proposed, no study had been found that had attempted to catalog the practices used by instructors in establishing their teaching presence in an online environment. From that perspective, this study makes a contribution to the body of knowledge, applying a temporal lens and documenting how successful instructors established teaching presence.

The need to conduct further research on teaching presence had been identified by several other researchers. To improve the quality of e-learning, Joo, Joung, & Kim (2013), suggested that understanding how presence was perceived was as important as understanding whether it existed or not. Duncan and Barnett (2010) asserted that the perspective of experienced instructors was critical in understanding the nuances of establishing a productive and effective classroom climate in the online environment. They also suggested that further research into best practices for preparing teachers to teach online was needed using that perspective. Baran et al. (2013) called for further
research on how experienced instructors created their online persona, or presence, examining their practices, perspectives and assumptions in doing so. This study served, in part, to answer the call of these researchers by exploring within a single context the experiences of a set of successful instructors as they described the processes they undertook in establishing their teaching presence in their online classrooms.

Of additional interest was how an instructor can consistently influence the academic climate in the online environment. Ekmekci (2013) and Bowden (2012) both presented arguments of the responsibilities instructors hold in setting academic expectations and ensuring that standards of scholarship are upheld at graduate levels. Cognitive development within a highly interactive and collaborative environment requires the instructor to knowingly and skillfully cultivate an environmental climate that motivates and engages the students not only as individuals but as a group (Cho & Kim, 2013; Garrison & Akyol, 2013; Tsiotakis & Jimoyiannis, 2016). While the phenomenon of an intellectual climate exists in both online and traditional classrooms, it is only by examining the experiences, decisions and actions of online instructors as done in this study, that an understanding of an instructor’s role in establishing such a climate in the online context could be gained. Cox-Davenport (2010) initiated the exploration into climate setting in her dissertation study of how social climate was established in the online classroom. However, no other study which addressed intellectual climate setting had been identified by the researcher at the time of proposal. A study, such as the one conducted, that examined and shared the insights and practices of experienced instructors provides insight for practitioners with respect to this concern.
The Community of Inquiry (CoI) framework, introduced by Garrison, Anderson, and Archer (1999) has been used as a model to describe and evaluate online education for over a decade. Teaching presence is a primary element of this framework, and is seen as vital to a successful learning environment. The findings of this study contribute from a practical pedagogical perspective to the body of knowledge with respect to this theoretical framework as suggested by Shea et al. (2010).

Barriers and Issues

Issues Related to this Study

As was previously mentioned, the researcher was employed as an academic administrator at the institution which is identified as the site of this study. Issues of power and risk related to selecting a site where the researcher is employed is often a barrier to case study research (Creswell, 2013). Creswell indicates these issues include power imbalance when study participants report to the researcher, concerns over unfavorable findings, or disclosure of private information. This study relied on current and historical references to instructor experiences in an institution where the researcher held a position of authority over the instructors. All of the participants were actively teaching with the selected institution at the time of the interviews. However, the researcher was no longer employed at that institution, for a period of more than two years, thereby eliminating these concerns.

Barriers Related to this Study

While the case study relied primarily on in-depth interviews, other forms of data often are used to verify accounts given during interviews (Creswell, 2013). The
researcher no longer had direct access to the active online environment used within the institution or certain forms of data. This barrier was not seen as significant, as the primary focus of this study was on the experiences of the instructors and not the evaluation of course artifacts. However, for the purposes of this study, the researcher had been granted access to historical records of student evaluations and course statistics such as posting rates by instructors and students. Where applicable, these data were utilized. The approvals for the use of these data are included with IRB materials in Appendix A.

Assumptions, Limitations and Delimitations

Assumptions

A primary assumption made by the researcher was that an intellectual climate appropriate for the courses taught by the instructors selected as participants was achieved. While it may be contested that accelerated course terms and structured online course environments create challenges to creating scholarly climates (Bowden, 2012), it was not the focus of this study to determine if an intellectual climate was established or at what level academic rigor was achieved.

Another assumption made by the researcher was with respect to the relationship held with the instructors and its effect on the responses provided in the interview. Study participants were instructors employed while the researcher served as the Academic Dean for the institution serving as the research site and relationships with them were formed over a ten year period. The researcher had maintained some level of contact with the instructors as part of a professional network of colleagues after leaving the institution. The researcher presumed that since she no longer held an oversight position with the
university, the instructors would openly share their experiences, perceptions and viewpoints during the interview. The current Dean of the university initiated contact with the participants informing them that participation in the study was voluntary and would have no impact on their status or contract assignments. Notations regarding the level of contact between the researcher and the individual instructors were recorded and disclosed as part of the demographic profile for each participant to reduce any concerns of bias being introduced.

Limitations of the Study

A case study can provide robust and rich accounts of a phenomenon through the in-depth interviews conducted, which are then supported by other forms of data collected (Yin, 2014). A limitation of this study was with respect to the data provided by the institution that were collected outside of the interviews. The institution provided the researcher with end of course evaluation data for the three year period established within the boundaries of the case. The data were provided at a level of granularity that allowed for identification at a course and instructor level which enabled the researcher to make comparisons among the interview subjects and other instructors at the institution. Data related to other instructors were only referred to in an aggregate form as an average of student evaluation scores, in order to maintain confidentiality.

A second limitation that affected this study, often identified with case study research, was with respect to the generalizability of findings due to the small sample utilized (Willis, 2008). While generalizability normally refers to statistical inferences made to larger populations, Yin (2014) identifies the importance of the lessons learned drawn from the findings of qualitative research. As a result, Yin recognizes the value of
collective case studies which provide larger sample sizes that support analytic generalizations which emerge from the findings of these studies. Analytic generalizations, as defined by Yin, provide “the logic whereby case study findings can extend to situations outside of the original case study, based on the relevance of similar theoretical concepts or principles (p.237).” Given this, even though findings from this case study were not generalizable from a statistical perspective, findings support analytic generalizations related to the construct of teaching presence and the Community of Inquiry (CoI) model, a theoretical framework utilized in research associated with online education for the past decade.

Delimitations

The case study, as a bounded system, had inherent delimitations which affect the ability to replicate or extend the research study. The first delimitation of this study was the focus on graduate level courses (e.g., Master’s), where the program of study was in a professionally-oriented and practitioner-focused discipline, and may not apply to institutions offering other types and levels of degree programs.

The second delimitation of this study was the target audience, which was made up of practitioners who teach at graduate level institutions which adhere to structured learning environments in order to promote brand or pedagogical uniformity in their educational offerings. Structured environments, such as that established at the research site, are typical of for-profit institutions and may affect the applicability of findings to other learning contexts.
Definitions of Terms

The following terms are defined to provide clarity for the reader:

Asynchronous Discussion Forums: Asynchronous discussion forums, or threads, are text-based message exchanges embedded in the online learning environment that are time and place independent, allowing students and instructors to collaborate on course related topics (Garrison, Anderson & Archer, 1999).

Community of Inquiry (CoI): The Community of Inquiry (CoI) is a framework which defines and describes the process of the collaborative learning emerging as a result of computer conferencing and provides a means of measuring the elements of the online learning experience (Garrison, Anderson, & Archer, 2010). The model includes three primary elements: teaching presence, social presence, and cognitive presence.

Higher Order Learning: Widely regarded as the hallmark of university education, higher order learning is characterized as the critical examination of new facts and the effort to make numerous connections with existing knowledge structures (Rourke & Kanuka, 2009; Kidder, 2105). When defined by Bloom’s taxonomy, descriptors used for higher order learning include analysis, synthesis and evaluation (Bowden, 2012).

Intellectual Climate: Intellectual climate is a scholarly environment in which students are motivated to explore subject matter in depth and with the purpose of building knowledge through interaction, application of methods, problem solving, and critical reflection (Bowden, 2012).
Teaching Presence: Teaching presence, a construct of the CoI model, is the mechanism that bridges the transactional distance between instructor and student and supports and enhances social and cognitive processes for the purposes of realizing learning outcomes through direct instruction and facilitation of discourse (Garrison, Anderson, & Archer, 1999).

List of Acronyms

The following are a list of acronyms used within this document.

Community of Inquiry (CoI)
Contribution to Learning (CtL)
Course Interaction (CI)
Interpretative Phenomenological Analysis (IPA)
Institutional Review Board (IRB)
Learning Management System (LMS)
Massive Open Online Courses (MOOCs)

Summary

This study represented original research with respect to the topic of teaching presence and its influence on the intellectual climate within the online classroom environment. While the construct of teaching presence has been widely studied over the past decade, most studies have relied on the quantitative analysis of discussion threads within online courses to measure the existence of teaching presence rather than exploring
the essence of the presence itself or the processes instructors undertake to establish their presence in an online learning environment (Shea et al., 2010). At the time of proposal, no study could be found addressing the topic of establishing the intellectual climate of a course, although an exploratory study on setting social climate was completed by Cox-Davenport (2010).

Using a collective case study approach, the experiences of online instructors were explored to ascertain the nature of teaching presence in a specific online context and gain insight on how pedagogical choices might influence the establishment of an intellectual climate appropriate to the course offering. A qualitative approach allowed for the in-depth exploration of instructor’s experiences, intentions and perceptions as they related to establishing their presence within an online environment (Creswell, 2013). Collective case study was selected as a methodology due to its ability to help develop an in-depth understanding of the intentions and perceptions associated with processes undertaken by the instructors, rather than focus on the exploration of the feelings and meanings they derived from their lived experiences.

From a practical pedagogical perspective, this study explored the strategies, intentions, and perceptions of successful instructors as suggested by Shea et al. (2010) and contributes to current knowledge on teaching presence, a construct associated with the Community of Inquiry (CoI) model introduced by Garrison, Anderson and Archer (1999). This study examined teaching presence from the instructor’s view point and expanded upon three previous qualitative investigations by:
1. Revealing the meaning and significance of teaching presence for online instructors in a specific online context (expanding on Conceição’s 2006 study);
2. Discovering the practices, strategies, intentions and perspectives of successful instructors to deepen the understanding of online teaching presence (expanding on Baran et al.’s 2013 study); and
3. Exploring the implications of teaching presence on setting the intellectual climate in the online environment (expanding on Cox-Davenport’s 2010 study).

Themes that emerged from this study provided support for and expanded upon the findings of these previous studies, providing an original contribution to current knowledge of the phenomenon of teaching presence as well as practices applied to its establishment in the online environment.
Chapter 2

Review of Literature

Introduction

The term e-learning emerged in the mid-1990s to identify forms of education that incorporated technologies in the delivery and execution of instruction (Friesen, 2009). Garrison et al. (1999) described e-learning in the context of a community of learners who are not bound by time or place, as with traditional classroom instruction, but who relied on computer mediated interaction to facilitate the process of learning. Interaction in the online learning environment, not only involves the exchange of information intended to increase or reinforce knowledge development within the context of the course, it also actively encourages dialogue which leads to individual knowledge construction (Bondi, Daher, Holland, Smith, & Dam, 2016; Thurmond & Wamback, 2004). In the e-learning environment, therefore, the importance of the engagement of students in active discourse which brings about learning is a central component in evaluating the effectiveness of online education (Friesen, 2009).

In the online learning environment, instructors most often promote this discourse through asynchronous discussion threads within which students interact with the instructor and each other (Niess & Gillow-Wiles, 2013), although interaction with students extends beyond just discussions (Shea et al., 2010). Garrison, Anderson and
Archer (1999, 2001) argued that it is through this interaction that a community of learning is created and sustained, and that it is within the “community of inquiry” that critical thinking is developed and learning results. It was from these foundations that the Community of Inquiry (CoI) model was formulated. This theoretical model introduced by Garrison et al. in 1999 has been prominent in online education research for the past decade.

While most qualitative studies do not preselect a theoretical framework around which the study is built (Creswell, 2013), it is important to understand how the research study aligned with current theoretical debate about the learning experience in the online environment, as the goal of this study was to utilize instructors’ experiences to provide greater understanding of teaching presence, a key construct in the CoI model. As suggested by Munhall and Chenail (2008), however, it is an important distinction that the theoretical model developed by Garrison et al. (1999, 2001) is not the theory from which the study is derived, but rather provides a framework that informs the method of the study.

This review of literature, therefore, will include the following:

1. An explanation of the Community of Inquiry (CoI) model;
2. A description of CoI constructs important to this study;
3. A description of the evolution of pedagogical approaches and delivery methods in the online learning environment;
4. A summary of the need for the research conducted in this study;
5. A summary of the previous studies serving as a foundation for this study; and
6. A brief explanation of the methodological approach utilized in this research.
Community of Inquiry (CoI)

CoI Model

The Community of Inquiry (CoI) model introduced by Garrison et al. (1999) provides a conceptual framework for studying the educational experience of online learners. This model relies on the assumption that learning occurs as a function of three primary and interdependent elements: social presence, cognitive presence, and teaching presence. It has been used extensively over the past decade in the investigation of online learning environments in higher education (Bangert, 2008; Garrison & Arbaugh, 2007; Rourke & Kanuka, 2009; Xin, 2012). It is an assumption of the model that the interactions among the three forms of presence result in the establishment of a community of inquiry in which critical thinking can develop and thrive (Arbaugh, 2013). Social presence is essential to group relationships and cohesion and creates a level of trust which engenders a feeling of community among the participants of a course, and is dependent on a climate of open communication necessary to support learning (Cox-Davenport, 2010). Cognitive presence, which refers to the extent to which meaning can be derived from sustained reflection and interaction, is essential for the development of critical thinking and a fundamental requirement for success of adult learners (Costley, 2015; Ke, 2010; Kyei-Blankson et al., 2016). Finally, the model identifies teaching presence as a complex construct which bridges the transactional distance between instructor and student through interaction and creates an environment within which social and cognitive processes can occur (Arbaugh & Hwang, 2006; Garrison, Cleveland-Innes, et al., 2010; Yang et al., 2016).
Integral to the CoI model is the presumed interrelationship among the three core constructs. Graphically represented by three intersecting circles, the CoI model identifies the overlap and interdependence of the three elements (Garrison & Arbaugh, 2007). At the intersection of these core constructs are three functions identified by the authors and presumed to be carried out primarily by the instructor to ensure a meaningful and successful educational experience. These functions of selecting content, supporting discourse, and setting climate are used as indicators of each presence and represent how the instructor creates the presences identified in the model (Garrison et al., 2001). While the graphic depiction of these functions in the intersection of the presences may imply their importance in establishing a productive learning environment which encompasses all three presences, these functions have been primarily designated for use in measuring and evaluating the construct of teaching presence.

As discussed by Garrison and Arbaugh (2007), Bangert (2008), Rourke and Kanuka (2009), and Xin (2012), research related to communities of inquiry in the past decade has been predominantly focused on the investigation of indicators of the primary constructs of the CoI model (social, teaching and cognitive presence) and the verification of their existence. Citing that much of the research conducted in the ten years after its introduction focused on the examination and analysis of the individual constructs with an assumption of interdependency, Xin (2012) stated that few have deeply explored the true nature of the complex interrelationships that exist between and among the constructs. Xin contended that while the model provides a framework for identifying what composes a successful learning environment, the model itself is inadequate in providing insight on how to achieve such an environment.
While the model has become widely respected and used in educational research since its introduction, it is not without other critique. Rourke and Kanuka (2009) contended that studies associating the CoI elements with peripheral outcomes such as student satisfaction were premature as they believed the model had not been thoroughly examined with respect to its representation of a meaningful learning experience. Citing that a lack of evidence existed with respect to showing that the model adequately represented the achievement of intended learning outcomes, the authors were critical of studies that extended beyond the validated constructs of the model. Focusing on the reference to deep and meaningful learning in the description of the CoI model, Rourke and Kanuka conducted a meta-analysis of 55 studies from a pool of 252 studies which referenced the CoI model. They found only five studies that examined learning as an outcome, but were critical of those because the construct was operationalized as perceived learning, leading them to state that those studies could not actually provide an exact measure of whether learning did occur.

Garrison, Anderson, and Archer (2010) defended the model arguing that it was only intended for examination of the learning process, not the results of the process. The goal of the framework, as discussed by Garrison, Anderson, et al. (2010) was to define and describe the process of collaborative learning emerging in online educational environments, as focus was placed on the differences in communication that existed as a result of the delivery medium. In addition, they stated that the CoI framework was originally intended to support exploratory and descriptive research, but over time the validation of survey instruments have aided the growth in quantitative approaches related to examining the existence of relationships among the elements.
Debate over the CoI model continues to evolve. Investigations into teaching presence provided increased evidence as to the importance of the instructor’s role in the learning process, but also raised contention that the self-regulated learner greatly influences the learning process (Bawa, 2016; Shea & Bidjerano, 2010). While teaching presence was primarily accepted as a responsibility of the instructor, the collaborative nature of the online environment relies on active participation by all members to contribute to shared learning. This awareness of the role of the learner has raised suggestions by Shea and Bidjerano (2009, 2010, 2012) that a new element, called “learning presence” should be incorporated into the model to fully recognize the role of the student separately from the role of the instructor. This suggestion was rebutted by Akyol and Garrison (2011), stating that such a segregation of the learner would be incongruent with the collaborative and supportive nature of the online environment, and that teaching presence represented the shared agency of the learning process which combined the roles of teacher and learner in a complimentary and interdependent manner. However, the concepts of self-regulation and co-regulation introduced in Shea and Bidjerano’s (2010) argument have opened investigation into the construct of metacognition, viewed as a required cognitive ability to achieve deep and meaningful learning at both an individual and shared level (Garrison & Akyol, 2013).

While theoretical exploration continues, practical pedagogical research has also been called for (Baran et al., 2013; Joo et al., 2013; Shea et al., 2010), specifically with respect to the construct of teaching presence and its implications for improving the practice of teaching.
Teaching Presence

The element of teaching presence has emerged as an integral part of the model with respect to its relationship with the other two elements and its influence on student satisfaction, perceived learning and sense of community (Joo et al., 2013; Southcombe, Fulop, Carter, & Cavanagh, 2015). Teaching presence was presented by the authors of the CoI model as the “binding agent” which directs the educational purposes for the community of learners (Garrison et al., 1999). In the original presentation of the CoI model, teaching presence was not specifically defined, but rather described as a composite of two primary functions: design of the educational experience and facilitation of learning activities. While the authors suggested that any of the participants in the community of inquiry could carry out these functions, they noted that both activities fell primarily in the responsibilities of the instructor.

Teaching presence was identified through three categories of indicators in this first definition of the CoI model: instructional management, building understanding, and direct instruction (Garrison et al., 1999). Instructional management was described as the planning and structural designing of activities associated with the course environment. Building understanding was explained as the process that affected the academic integrity of the learning community by creating and maintaining inquiry in the educational context. Direct instruction called for considerable involvement by the instructor to facilitate the level of discourse and reflection needed to ensure that learning was achieved.

The indicator categories for teaching presence have evolved since the time this original description was proffered. For example, instructional management, originally
seen as an exclusive domain of the instructor, has been increasingly supplemented by external resources such as course designers prior to course delivery. As noted by Garrison and Arbaugh (2007) the design, organization and accessibility of course content in an online class is generally seen as the first indication of an instructor’s presence. However, the transfer of these responsibilities to supporting sources led to an evolution of the view of this indicator as much more aligned to the category of instructional design, thus lessening its role as an indicator of teaching presence. Research such as that conducted by Junion (2012), Lambert and Fisher (2013), and Schindler and Burkholder (2014) supports the need for developing instructional design strategies that enable the creation of CoI in online course environments, but the diminished role the instructor plays in this aspect of course development has caused this category to be removed as an indicator for the element of teaching presence.

Similarly, the concept of “building understanding” identified in the first description of teaching presence, evolved to the more descriptive indicator of “facilitating discourse”. As a result of these changes, facilitation of discourse and direct instruction were left as the key indicators of teaching presence during the examination of an active course environment (Garrison & Arbaugh, 2007). Both indicators focus on instructor involvement within a course, and refer to the relevance of instructor interaction with students in the context of the course but differentiate between student-led and instructor-led interaction respectively.

The success of online courses is most often dependent on the quality of the interaction in the discussions, and the task of facilitating or generating the interaction can be complex (Maddix, 2012). A learner-centered approach enables an instructor to create a
community of learning for the student that invites engagement and interaction (Lehman & Conceição, 2010; Kidder, 2015). Arbaugh and Benbunan-Fich (2007) examined the nature of interactions between students and instructors and found that whether an instructor chose to play a central role as the course expert or play a facilitator role as an enabler of collaborative learning, the presence of an instructor was a critical factor in ensuring a successful learning environment. Kanuka et al. (2007) maintained that the instructor’s active role and presence in constructive debate and peer-based collaboration activities is required for the development of critical thinking skills. Bangert (2008) found that deeper levels of understanding were less likely to develop if there was a lack of direct instructor engagement. Akyol and Garrison (2011) determined that interaction with the instructor served an important role in the mediation and interpretation of differing perspectives and understandings that arose during discourse within an online learning environment. The presence of the instructor is necessary to establish a framework for the course so that all members realize the intended learning outcomes (Lambert & Fisher, 2013).

Instructor involvement is a critical factor in achieving or improving student outcomes and cognitive development, but creating a teaching presence in the online learning environment may be the greatest challenge presented to many instructors (Ekmecki, 2013). Teaching presence can be established through effective interaction, but is dependent on the nature of the communication that occurs including presentation of information, demonstration of skills or expertise, and organization of concepts and ideas (as was expressed in the seminal work by Moore, 1989). In their study of instructional effort associated with establishing teaching presence, Shea et al. (2010) noted that the
locus of research has primarily been limited to discussion threads, but contended that there are many observable instances of teaching presence outside the discussions. They recommended that rather than focus on continued quantitative studies of instructor interaction levels, further qualitative study into the intentional efforts of instructors be conducted in order to fully understand the nature of teaching presence. The idea of a more holistic view of teaching presence has gained support of other researchers such as Stein and Wanstreet (2013) and Ekmekci (2013) who see a multi-dimensional approach needed in developing guidance for instructors.

Setting Climate

As stated earlier, setting climate is identified in the CoI model as a function primarily performed by the instructor which is used in establishing a productive learning environment. This function, as depicted in the model intersects the primary elements and used to represent how the instructor creates the presences identified in the model (Garrison et al., 2001). While selecting content and supporting discourse have been the focus of studies related to the construct of teaching presence, little has been investigated with respect to the function of setting climate and its role in establishing teaching presence.

A few recent studies have indicated the importance of the learning climate, such as the study conducted by Brock and Abel (2012) which found that instructors’ actions were a significant element in creating an environment for high-level learning. However, an exploratory study by Cox-Davenport (2010) was the first and appears to be the only to investigate the climate setting function as a method of instruction used during the establishment of teaching presence within the online environment. Using a grounded
theory approach, Cox-Davenport identified characteristics of activities and strategies employed by instructors while establishing their teaching presence as “climate factors”. By examining which climate factors were specifically employed by instructors when setting a climate of open communication and then exploring the perceived effect of those climate factors on the development of social presence within their online courses, Cox-Davenport’s findings suggested that the level of influence the instructor exerts over the creation of the educational environment in the online classroom can be attributed to strategies which enhance social presence and enable student participation. Cox-Davenport concluded that the identification of the most beneficial climate factors employed by instructors has implications for the development of effective practices with respect to the creation of the social environment within the online classroom.

While the Cox-Davenport study was an attempt to focus on the methods used to set the appropriate social climate for an online learning environment, it fell short of bridging questions relating to the development of cognitive presence and learning achievement. As a result, there is a gap in knowledge related to the function of setting climate for the purposes of cognitive development, where critical thinking and metacognition would develop and be sustained. This gap in knowledge is acknowledged by Shea et al. (2010) in their call for further research into the intentions and choices of instructors in establishing their teaching practices and the effectiveness of those choices in promoting cognitive presence.
Evolution of Pedagogical Approaches

Regardless of how online instructors are characterized (e.g., “sage-on-the-stage”, “guide-on-the-side”), the role they play in facilitating discussion and the quality of their participation is crucial for successful learning in online environments (Hung & Chou, 2015; Mazzolini & Maddison, 2007). While an instructor conducting courses in a face-to-face environment may employ a number of strategies to create the intellectual setting desired, the physical presence an instructor shares with a student helps establish a level of interpersonal interaction and observation that enables an instructor to adjust strategies based on student reaction and performance. In the asynchronous environment of online education, though, a major challenge that instructors continue to face is how to establish a teaching presence that contributes to the creation of an engaging community which promotes social presence while setting the appropriate intellectual climate essential to achieving the cognitive presence necessary for higher-order learning outcomes (Baran et al., 2013).

Anderson and Dron (2011) evaluated the evolution in instructional approaches used in concert with changing technologies over time and delineated three generations of educational pedagogies that currently exist in online environments: cognitive behaviorist, constructivist and connectivist. They report that each pedagogical generation establishes different relationships and roles for instructors and students and incorporates all three CoI presences, but in greatly different ways. The researchers concluded that all three pedagogical approaches have applicability in an online learning environment, but the instructor still serves as the decision maker with respect to which pedagogical approach is used within the context of a particular course.
Cognitive behaviorist pedagogies emerged out of a need to overcome issues associated with motivational or mental barriers that influenced educational success in online environments and focused on the individual nature of learning (Schell & Janicki, 2013). Behaviorist models position the instructor as the expert who transmits knowledge and is in control of the learning process. Practices that stress the importance of clearly defined learning objectives are viewed to address the processes associated with the stimulation of learning and set standards for educational outcomes achievement (Anderson & Dron, 2011). Behaviorist models rely heavily on instructor control and are useful for adult learners when entering a new content area or discipline where there is little transfer of previous knowledge or experience (Wang & Cranton, 2013). In cognitive behaviorist environments, where social presence is rarely established and teaching presence is reduced by distance and technology, cognitive presence is established under highly structured models relying on learner-content interaction (Anderson & Dron, 2011). In these environments, students must be highly motivated and self-directed and are representative of more traditional distance education programs where the role of the instructor is focused on course design and assessment. Self-directed learning can be greatly enhanced by technology, allowing the instructor to serve as a consultant, linking the student to resources needed to enable learning (Wang & Cranton, 2013).

Constructivist pedagogies focus on the importance of interaction in educational processes and acknowledge the social nature of learning and knowledge building (Mallon, 2013). Constructivist models allow students to draw from previous knowledge and experience as well as interactions with peers to create and extend knowledge and apply solutions to problems (Schell & Janicki, 2013). While primarily viewed as learner-
centered practices, instructors serve a vital role in shaping the learning activities and guiding students through cognitive development (Anderson & Dron, 2011).

Constructivist models transfer some of the responsibility for teaching to the student, through collaborative activities, creating a shared agency for the learning process (Schell & Janicki, 2013). In constructivist pedagogies, learner-instructor interaction increases in importance, greatly influencing the establishment of both teaching and cognitive presence. In these learning environments, however, social presence is greatly dependent on the instructor establishing a climate for open communication that invites learner-learner interaction (Anderson, 2013).

Connectivist pedagogies which are emerging as a result of the influence of social networking in the learning environment, assumes that the learner is responsible for finding and applying relevant and current knowledge during problem solving activities (Anderson & Dron, 2011). Connectivism blends the models of cognitive behaviorism and constructivism and is characterized by self-paced, autonomous learning supported by peer-to-peer collaboration networks (Mallon, 2013). In connectivist environments, such as massive open online courses (MOOCs), the instructor is no longer solely responsible for content selection and interpretation, as the social network developed by the student plays a greater role in the learning process (Anderson & Dron, 2011; Mallon, 2013). In these pedagogical situations, social presence plays a predominant role in the learning process, with teaching presence established through collaboration and open support of the learning community. However, Anderson (2013) noted that instructors in MOOCs are falling back on conventional cognitive behaviorist pedagogies (e.g., video lectures,
automated quizzes) to deal with scalability, substituting learner-instructor interaction with learner-content interaction, as a means to maintain control of course activities.

**Research Needed on 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 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 et al., 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 Jimoiyannis (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 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 role the instructor plays 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.

*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 study (2006) was initiated due to concerns for faculty development requirements and the increased awareness of pedagogical issues related to online instruction and explored how instructors perceived and described their online learning experiences. This phenomenological study 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, and 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 none the less found the teaching experience rewarding and more fulfilling that 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 to conclude that knowledge came from the shared activities within the learning community, establishing that the instructor no longer held 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 (pg. 1).”

The need to understand what actions supported this intentional creation of presence was the basis of the study conducted by Baran et al. (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 study, in that 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, relying on oral and visual presentation, 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 instructors’ 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 practices, strategies, intentions and perspectives of successful online instructors to order to improve preparation of instructors for creating presence in their online courses.

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 themes
associated with setting climate emerged from the analyses performed by Cox-Davenport and were described as follows:

- **Humanizing**: Using mechanisms that supported connecting students to the content and each other, gaining insight and understanding of who the students were.
- **Meaningful Socialization**: Building community for a purpose, with intention; creating relevance for students through exchange of information, experience and professional interests.
- **Facilitating Connections**: Developing community connections within a course; building an awareness of each other and the commonalities within the learning group as peers in learning.
- **Student Control**: Empowering students to be self-directed learners; created a student-centered environment which encouraged involvement and accountability.
- **Cyber Role Model**: Demonstrating behavior of involvement and participation; setting expectations for performance and engagement.
- **Maintain**: Reducing obstacles to learning, lessening frustrations of students by connecting frequently to create a bridge between student and the course.
- **Awareness**: Being vigilant and cognizant of student behaviors and participation; developing relationships that allow for open communication.
- **Lifelines**: Being available and accessible as a resource for support; intentional outreach to ensure student understanding; being responsive in resolving issues that impact student performance.
Methodological Approaches for Studying Teaching Presence

Rationale for Choosing Qualitative Research

The field of e-learning is relatively new in both practice and research although it has disciplinary foundations which include instructional design, distance education, and educational psychology (Friesen, 2009). Education research is adapting and changing as a result of the changes in the technological, social and economic developments that have emerged in the last few decades. Friesen contends that e-learning research must take into account the practices of teaching and learning with technology, specifically how educational practices and priorities may be adapting to technology use in unforeseen ways. Case studies provide a way to learn something about how educators are adopting and adapting to technology in an educational context, allowing for multiple interpretations through analysis (Friesen, 2009).

Case Study Methodology

The case study as a research method is favored by interpretivists due to its holistic treatment of the subject phenomenon in a natural setting (Willis, 2008). The use of case study arises out of the desire to understand complex social phenomena, allowing investigators to develop a holistic and real-world perspective of a representative instance of the issue being explored (Yin, 2014). Schramm offers the following definition of a case study (as cited by Yin, 2014):

The essence of a case study, the central tendency among all types of case study, is that it tries to illuminate a decision or set of decisions, why they were taken, how they were implemented, and with what result. (p.15)
Creswell (2013) submits that a primary challenge in case study research is selecting the case itself and making the determination of whether the study requires a single case or multiple cases to illustrate the issue being explored. Determining which bounded system and recognizing the effect the number of cases has on the depth of information that can be collected and analyzed are among the first challenges encountered in designing a case study. Tactics suggested by Creswell to address these challenges or mitigate the risks associated with them include:

1. Establishing a supportable rationale related to the purposeful sampling strategy for selecting the case(s) used in data collection.
2. Gathering enough information via multiple sources of data to present an in-depth picture of the case.
3. Clearly identifying the boundaries of the case in terms of constraints on time, events and processes.

A multiple case study generally refers to the selection of several cases from different contexts which relate to the same targeted phenomenon (Stake, 2006). The collective case study represents a repetitive application of procedures to each case selected, whereby each case selected is purposefully chosen within a bounded system to represent different perspectives of the issue being investigated (Creswell, 2013). Through careful selection of representative cases within the bounded system, the researcher is able to eliminate some level of variability by providing a homogenous sample (Stake, 1995). Utilization of a collective case, allows for the researcher to set aside situationality of the individual cases, and draw out themes that can be generalized to the sample (Stake, 2006). A collective case study allows the researcher to draw cross-case conclusions that
highlight commonalities among the individual cases, strengthening the findings of the study (Yin, 2014). Typically focusing on one specific context, importance is placed on understanding the diverse range of data collected, drawing findings with respect to the specific setting and considering implications of those findings to other settings (Willis, 2008).

Case study research is applicable when the inquirer has clearly identifiable cases within specified boundaries through which in-depth knowledge about the cases or comparisons of the cases can be derived (Creswell, 2013). Case studies typically collect a large and extensive amount of qualitative and quantitative data from a small set of subjects in contrast to collecting a small amount of information from a large cross-section of a population (Willis, 2008). A case study provides a researcher with a full variety of evidence – documents, artifacts, interviews, and observations – without the risk of intervention or manipulation of the behaviors being investigated (Yin, 2014). Stake (1995) describes a case as an integrated system in which both uniqueness and commonality are sought. Defining a case as a bounded system draws attention to it as an object rather than a process, and helps the researcher set limits or boundaries that are important in determining the scope of data collection (Yin, 2014).

Case study as a qualitative methodology often relies on in-depth interviewing techniques for data collection that range from very structured questioning to unstructured and unscripted conversations (Willis, 2008). The semi-structured interview is favored, being interpretive in nature, using a few predetermined questions to create a framework for the interview, and allows the researcher to be responsive and flexible in probing the narrative accounts of the participants. In many cases the interview is recursive, whereby
the researcher will revisit the transcripts with the participant when exploring themes or meanings of the responses. It is this reflective nature of the relationship between the interviewer and participant that allows for an accurate third person account of a first person experience (Seidman, 2006).

The in-depth interviews result in rich and reflective narratives of first person accounts which provide insight into these contextual experiences (Seidman, 2006). Data collection is supported by open questions and a flexible interview structure which invites description and narration by the participant. It requires the researcher to suspend or defer rationalization or evaluation of the responses in order to avoid any distortion of the data from personal bias during the analysis phase of the process (Creswell, 2013). This deliberate method for undertaking the interpretation as a systematic and evidence-based activity is referred to as “bracketing”, or exclusion of personal and professional explanations and theories, in order to view and understand the experience as it is lived (Friesen, 2009).

Methods of Analysis

Case study research has not been codified, and as a result, the rigor of analysis performed has been the subject of scrutiny even though it is recognized as a distinctive form of empirical research (Yin, 2014). As a result, a more structured approach to the analysis of the qualitative data is often sought. Interpretative Phenomenological Analysis (IPA), an experiential qualitative research method introduced in the mid-1990s, is used to understand experiences of particular groups of people within specific socio-cultural
contexts. IPA provides a process to analyze qualitative data when seeking to understand the first person perspective of lived experiences from the third person position (Smith et al., 2009).

IPA offers an approach to analysis that is characterized by a set of common processes and principles applied to the analytical task which is iterative and inductive (Smith et al., 2009). Processes used in IPA are applicable to the analysis of the collective case, in that they are designed to move from the individual to the shared experience, from description of phenomena to interpretation. The principles shared by IPA researchers are based on the commitment to understanding the participant’s point of view and context.

As described by Smith et al. (2009), the objective of the analysis phase in IPA is to identify patterns in the data and draw them into some form of structure. The researcher prioritizes each case of the phenomenon investigated and considers the convergence and divergence of the data among the participants. The process of coding the collected data is fundamental to the analysis phase. Using “free” or “open” coding to identify initial concepts, the researcher identifies emergent patterns and commonality among the cases then shifts to interpretive coding. Development of a structure that illustrates the relationships between the themes identified is used to check the credibility and coherence of the interpretation, before the researcher finalizes the narrative of the study.

**Summary**

Teaching presence is a phenomenon that exists in both physical and virtual classrooms; however, in the online learning environment teaching presence increases in importance as it provides a vital link to students who are separated by time and space
from their instructors (Afolabi, 2016; Arbaugh & Hwang, 2006). The Community of Inquiry (CoI) model introduced by Garrison et al. (1999) provides a conceptual framework within which teaching presence can be seen to influence the social and cognitive processes that occur in online learning environments. This theoretical model defines the existence of teaching presence 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). However, the role of the instructor and the necessity of the instructor’s presence in the classroom to set academic expectations and inspire intellectual curiosity is critical to scholarly achievement (Bowden, 2012; Ekmecki, 2013).

Setting an appropriate intellectual climate is a function used in establishing a productive learning environment. While Cox-Davenport (2010) explored instructor presence and its influence on setting the tone of the social climate necessary to influence student engagement, her study did not extend into setting climate for the purposes of cognitive development. It is known that establishing teaching presence is an intentional activity that can have a significant effect on learning persistence and the achievement of learning outcomes (Joo et al., 2013; Southcombe et al., 2015). There is an identified need for further research on how instructors establish teaching presence, calling for an examination of practices, perspectives and intentions of instructors from the perspective of experienced or exemplary teachers (Baran et al., 2013, Duncan & Barnett, 2010).
Qualitative research provides a means of exploring the phenomenon of teaching presence from the instructor’s point of view, allowing for in-depth discovery through an interpretive lens (Friesen, 2009). A collective case study approach provides a context specific exploration of the topic, allowing the researcher to draw cross-case conclusions that highlight commonalities among the individual instructors interviewed, strengthening the findings of the study (Yin, 2014). To provide a more rigorous approach to analysis, an experiential qualitative method called Interpretative Phenomenological Analysis (IPA) developed by Smith et al. (2009) was used as a means to increase the credibility of the study’s findings.
Chapter 3
Methodology

Introduction

Teaching presence and the process of establishing presence within an online environment can be a complex and subtle activity undertaken by an instructor (Anderson & Dron, 2011). While the existence of teaching presence has been the subject of research over the past decade, few studies have been undertaken to explore the phenomenon itself (Baran et al., 2013). This study was guided by the following research questions:

- **RQ1:** In a structured online environment, how do instructors establish teaching presence and inspire intellectual curiosity within the courses they teach?
- **RQ2:** In a structured online environment, what practices do instructors choose to employ when establishing teaching presence?
- **RQ3:** In a structured online environment, what are the intentions of instructors when determining which strategies will best help them establish teaching presence?
- **RQ4:** In a structured online environment, how do instructors perceive their decisions and practices relative to teaching presence and its influence on the intellectual climate in the classroom?
Utilizing a case study approach, the research questions were addressed as the participants revealed what teaching presence meant to them and described the processes they adopted to establish this presence in their online classrooms. The primary intent of a case study is to use data collected to yield new information focusing on a specific setting or context, to synthesize emerging patterns and identify needs for further research (Willis, 2008). This study was a collective case study, as defined by Stake (1995), limited to a specific institution.

A case study approach was selected for this exploration of the phenomenon of teaching presence due to its ability to help develop an in-depth understanding of the practices (how) and intentions (why) of the instructors rather than an exploration via a phenomenological study focusing on the meanings instructors derived from their lived experiences (Yin, 2014). Yin supports case study methodology as a preferred strategy when (a) research questions pose “how” or “why” inquiries, (b) the researcher has little control over events, and (c) the focus is on a specific context within which the phenomenon is occurring. This study fulfilled all three of these criteria.

As this study involved the participation of human subjects, approval from the Nova Southeastern University’s Institutional Review Board (IRB) prior to engaging in communication with any potential participant of the study (see Appendix A).

Aim

Drawing from previous research conducted by Conceiçao (2006), Cox-Davenport (2010), and Baran et al. (2013), this collective case study explored the experiences of selected online instructors in a specific online context to ascertain the nature of teaching
presence from an instructor’s perspective and to provide insight on how pedagogical choices might influence the development of the intellectual climate needed for cognitive achievement. It was the intent of this study to utilize the data collected within a specific context in order to generate a clearer understanding of how an instructor establishes teaching presence and the decision processes employed in doing so. Utilizing a research site where instructors follow a standardized delivery design for courses within a curriculum, it was the researcher’s belief that the context could provide a unique perspective for exploration and documentation of online instructors’ intentions, actions and perceptions while establishing their teaching presence.

It was also a goal of the study to identify areas for further research with respect to pedagogical development as suggested by Shea et al. (2010). By drawing on the experiences of successful online instructors in this collective case study, it was possible to identify commonalities in strategies, practices and methodologies which may serve as guidance in finding effective approaches for less experienced instructors as is discussed in Chapter 5 (Baran et al., 2013; Duncan & Barnett, 2010).

**Boundaries of the Case**

Binding the case helped ensure the study remained within a reasonable scope (Baxter & Jack, 2008). Defining the boundaries of this case relied on setting selection criteria that made it possible to identify instructors who were seemingly more effective at creating a successful learning environment than their counterparts, specifically as it applied to contributing to learning and facilitating learning activities. Utilizing student
evaluation data supplied from the research site helped accomplish this, with the general boundaries of the case originally defined as:

1. The instructors employed during a specific period of time (2010 – 2012) prior to the departure of the researcher from the position as academic administrator;
2. The instructors rated highly in their contribution to learning as measured by student evaluations (above a 3.2 score); and
3. The instructors rated highly in facilitating learning activities (e.g., discussion thread participation, feedback, responsiveness) as measured by student evaluations (above a 3.2 score).

Instructors who fell outside the boundaries of the case, and therefore were not eligible to be participants, included:

1. The instructors who met the criteria for inclusion but were no longer employed by the institution;
2. The instructors who became employed after the stated time period;
3. The instructors rated lower than a 3.2 score in their contribution to learning as measured by student evaluations; and
4. The instructors who rated lower than a 3.2 score in facilitating learning activities as measured by student evaluations.

The number of cases selected was also a consideration in determining the scope of the study. Stake (2006) advised that the benefits of a multiple case study are limited if fewer than four or greater than ten cases are used in the analysis. Yin (2014) suggested that two to three cases, depending on the complexity of the case, may be sufficient to derive a fundamental understanding of the phenomenon being studied. However, he
recommended that the selection of four to six cases provide the ability to identify
divergent themes, and six to ten cases, in aggregate, provide compelling support for the
initial set of propositions posed in a study. Creswell (2013) suggested limiting collective
case studies to no more than four to five cases. Small samples are also recommended in
the Interpretative Phenomenological Analysis (IPA) method, since the typical three to six
participants can generate substantial data (Smith et al. 2009).

Research Setting

The university that served as the research setting for this study was a graduate
school that offered degrees and certificates in the singular discipline of information
security. Programs were offered at masters and doctoral level, with the instructors of the
master-level courses being the focus of this study. Instructors were contracted as adjunct
faculty, assigned to one course per term when teaching, with average class size ranging
from five to twelve students depending on term. The unit of analysis in this collective
case study was an individual instructor. The context of the study was the highly
standardized teaching environment required by the institution. During the period of time
established as the boundary of the case, there were a total of 37 faculty members
employed by the university. Of those, 19 faculty members taught masters-level courses
during the period identified within the boundaries of the study. Seven faculty members of
the 19 were no longer employed at the university and therefore were not eligible to be
included in the study. Pseudonyms were assigned to the 12 instructors who were eligible
to participate in the study.

The university supplied End-of-Course Evaluation survey data that corresponded
to the time period identified as the case boundary. The data were criterion-based ratings
separated into five primary categories, and provided as aggregated ratings for each course taught by an instructor. Students rated an instructor’s performance on a 4-point scale, from 1 (Poor / Needs Improvement) to 4 (Excellent / Outstanding).

The university used the first four categories of evaluation (Course Interaction, Teaching Practices, Student Centered Approach, and Overall Effectiveness) when conducting performance reviews for faculty members. Each term, faculty members performing above the aggregate average scores in all four categories were identified as the most effective instructors, and recognized for their contribution to student success. Table 2 identifies the categories and subcategories associated with the student evaluations and a description of how the rating score was determined.

Table 2

*End-of-Course Evaluation Criteria*

<table>
<thead>
<tr>
<th>Category</th>
<th>Subcategory</th>
<th>Score Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Interaction</td>
<td>Organization and delivery of synchronous sessions</td>
<td>Calculated as average of subcategories</td>
</tr>
<tr>
<td></td>
<td>Facilitation of online discussions</td>
<td>Rated by students</td>
</tr>
<tr>
<td></td>
<td>Availability during chat sessions</td>
<td>Rated by students</td>
</tr>
<tr>
<td></td>
<td>Responsiveness to emails</td>
<td>Rated by students</td>
</tr>
<tr>
<td></td>
<td>Timely and regular feedback in gradebook</td>
<td>Rated by students</td>
</tr>
<tr>
<td>Teaching Practices</td>
<td>Coverage of course objectives</td>
<td>Calculated as average of subcategories</td>
</tr>
<tr>
<td></td>
<td>Use of practical and relevant examples</td>
<td>Rated by students</td>
</tr>
<tr>
<td></td>
<td>Clarity of grading</td>
<td>Rated by students</td>
</tr>
<tr>
<td>Student Centered Approach</td>
<td>Positive regard for students</td>
<td>Calculated as average of subcategories</td>
</tr>
<tr>
<td></td>
<td>Ensured understanding of course material</td>
<td>Rated by students</td>
</tr>
<tr>
<td>Overall Effectiveness</td>
<td></td>
<td>Rated by Students</td>
</tr>
<tr>
<td>Contribution to Learning (CtL)</td>
<td>Opportunities to collaborate</td>
<td>Calculated as average of subcategories</td>
</tr>
<tr>
<td></td>
<td>New knowledge acquired</td>
<td>Rated by students</td>
</tr>
<tr>
<td></td>
<td>Intellectual challenge of course</td>
<td>Rated by students</td>
</tr>
</tbody>
</table>
During the three year period identified in the scope of the study, there were 18 teaching terms during which courses were offered and instructors evaluated. However, upon receipt of the data, it was learned that the final term, November 2012, a system malfunction caused the data to be corrupted making those reports unusable for analysis, leaving only 17 terms of data available for analysis. The data provided by the university was summarized by the researcher on a term basis and aggregated to determine an average rating for the period under investigation. Similarly, the data was aggregated by instructor to determine individual performance for comparison purposes. The data shown in Table 3 display the average performance ratings of all instructors for the 17 term period. This average rating was used in identifying individual cases, as described later in the section titled Participant Selection.

Table 3

Instructor Performance Ratings- January 2010 to October 2012

<table>
<thead>
<tr>
<th>Category</th>
<th>Subcategory</th>
<th>Aggregate Average Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Interaction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organization and delivery of synchronous sessions</td>
<td>3.44</td>
</tr>
<tr>
<td></td>
<td>Facilitation of online discussions</td>
<td>3.48</td>
</tr>
<tr>
<td></td>
<td>Availability during chat sessions</td>
<td>3.50</td>
</tr>
<tr>
<td></td>
<td>Responsiveness to emails</td>
<td>3.44</td>
</tr>
<tr>
<td></td>
<td>Timely and regular feedback in gradebook</td>
<td>3.38</td>
</tr>
<tr>
<td><strong>Teaching Practices</strong></td>
<td></td>
<td>3.56</td>
</tr>
<tr>
<td></td>
<td>Coverage of course objectives</td>
<td>3.59</td>
</tr>
<tr>
<td></td>
<td>Use of practical and relevant examples</td>
<td>3.55</td>
</tr>
<tr>
<td></td>
<td>Clarity of grading</td>
<td>3.53</td>
</tr>
<tr>
<td><strong>Student Centered Approach</strong></td>
<td></td>
<td>3.60</td>
</tr>
<tr>
<td></td>
<td>Positive regard for students</td>
<td>3.62</td>
</tr>
<tr>
<td></td>
<td>Ensured understanding of course material</td>
<td>3.58</td>
</tr>
<tr>
<td><strong>Overall Effectiveness</strong></td>
<td></td>
<td>3.51</td>
</tr>
<tr>
<td><strong>Contribution to Learning (Ctl)</strong></td>
<td></td>
<td>3.43</td>
</tr>
<tr>
<td></td>
<td>Opportunities to collaborate</td>
<td>3.31</td>
</tr>
<tr>
<td></td>
<td>New knowledge acquired</td>
<td>3.51</td>
</tr>
<tr>
<td></td>
<td>Intellectual challenge of course</td>
<td>3.48</td>
</tr>
</tbody>
</table>
Participant Selection

Purposeful sampling is typically employed in case study 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 to a population (Creswell, 2013). Multiple strategies for purposeful sampling exist that provide the researcher the ability to conduct a credible and reliable study, some of which were utilized in the studies this research project expanded upon. For example, in the phenomenological study conducted by Conceicao (2006), two purposeful sampling techniques were employed: snowball sampling and criterion-based sampling. In her selection criteria, Conceicao only sought to identify instructors in master’s level programs who taught in the online modality but did not seek to identify their level of proficiency or effectiveness as part of her study. Similarly, Cox-Davenport (2010) who also employed the snowball sampling technique, sought to identify instructors who taught in the online modality in master’s level nursing programs without setting any criteria associated with their level of proficiency or effectiveness other than the referral made by a previous participant.

Baran, Correia, and Thompson (2013) sought to identify successful practices by exemplary instructors in their multiple-case study. However, the researchers did not define for themselves what an exemplary instructor was, but rather allowed the administrator in each of the six case settings to identify their own success criteria for the instructors nominated for the study. The common criteria that emerged from all teaching contexts they explored were: knowledge of students, knowledge of content, effective communication, and high scores in course evaluations.
Yin (2014) proposed that in multiple-case studies the utilization of replication logic in case selection, rather than sampling logic, would yield sample cases that would produce similar results (literal replications) as opposed to producing contrasting results due to anticipated differences in the sample cases (theoretical replications). For the purposes of this study, which was searching for commonalities among what were perceived as successful and effective instructors, homogenous or criterion based sampling techniques were selected to be used in order to produce more consistency in the results (Creswell, 2013).

Achieving homogeneity in the sample cases was an objective of the participant selection process for this researcher, as the intent of this study was to draw from the experiences and insights of successful instructors. As was discussed in Chapter 1, the prospective participants all taught at the institution which had a highly standardized delivery format on the eCollege platform which included required asynchronous discussion threads, synchronous collaboration sessions using an embedded whiteboard capability, and expected feedback response times. Although it was expected that participants in this study might have online teaching experiences with a variety of institutions, it was the shared experience of working within the same structured academic program at the specific school that provided the first level of homogeneity in the sample.

Homogeneity for the purposes of this study was measured not only from this common instructional background but from the ratings of instructors in the criteria identified as boundaries of the case which served as selection criteria, similar to the study conducted by Baran et al. (2013). Turning to the boundaries of the case as the selection criteria, the researcher first eliminated instructors who fell outside the boundaries of the
case. Specifically instructors no longer employed with the institution were eliminated from the original pool of 19 potential participants teaching in the masters programs. This reduced the total number of eligible instructors to 12. Pseudonyms were assigned to these instructors.

Next, the researcher analyzed the data related to the contribution to learning (CtL) category as rated by student evaluations for the 12 remaining instructors. The boundary set for the case included instructors whose aggregate score was above a 3.2 for this category of evaluation. The researcher identified 11 instructors whose aggregate ratings met this criterion. Table 4 ranks the 11 candidate instructors by their ratings for that category and the subcategories of evaluation.

Table 4

<table>
<thead>
<tr>
<th>Candidate</th>
<th>Category / Criterion</th>
<th>Subcategories</th>
<th>Opportunities to collaborate</th>
<th>New knowledge acquired</th>
<th>Intellectual challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate Average Rating</td>
<td>3.43</td>
<td>3.31</td>
<td>3.51</td>
<td>3.48</td>
<td></td>
</tr>
<tr>
<td>Davina</td>
<td>3.69</td>
<td>3.64</td>
<td>3.78</td>
<td>3.64</td>
<td></td>
</tr>
<tr>
<td>Pavia</td>
<td>3.66</td>
<td>3.45</td>
<td>3.70</td>
<td>3.83</td>
<td></td>
</tr>
<tr>
<td>Leighton</td>
<td>3.59</td>
<td>3.63</td>
<td>3.68</td>
<td>3.47</td>
<td></td>
</tr>
<tr>
<td>Simon</td>
<td>3.59</td>
<td>3.59</td>
<td>3.59</td>
<td>3.61</td>
<td></td>
</tr>
<tr>
<td>Karissa</td>
<td>3.58</td>
<td>3.41</td>
<td>3.63</td>
<td>3.70</td>
<td></td>
</tr>
<tr>
<td>Dominik</td>
<td>3.52</td>
<td>3.40</td>
<td>3.59</td>
<td>3.58</td>
<td></td>
</tr>
<tr>
<td>Solomon</td>
<td>3.51</td>
<td>3.29</td>
<td>3.64</td>
<td>3.62</td>
<td></td>
</tr>
<tr>
<td>Hadrian</td>
<td>3.39</td>
<td>3.26</td>
<td>3.64</td>
<td>3.44</td>
<td></td>
</tr>
<tr>
<td>Yves</td>
<td>3.35</td>
<td>3.20</td>
<td>3.41</td>
<td>3.45</td>
<td></td>
</tr>
<tr>
<td>Yosef</td>
<td>3.33</td>
<td>3.27</td>
<td>3.36</td>
<td>3.35</td>
<td></td>
</tr>
<tr>
<td>Ludwig</td>
<td>3.24</td>
<td>3.11</td>
<td>3.33</td>
<td>3.35</td>
<td></td>
</tr>
</tbody>
</table>

Next, as identified in the case boundaries, the researcher analyzed the data related to facilitation of learning activities (e.g., discussion thread participation, feedback,
responsiveness) as rated by student evaluations. These activities were rated by students using the course interaction (CI) category in the End-of-Course Survey. Using the average score of 3.2 as the criterion, the researcher found that all 11 of the candidate instructors meeting the first criterion had scores that met or exceeded the second criterion. Table 5 ranks the 11 candidate instructors by their ratings for that category and the subcategories of evaluation.

Table 5

*Candidate Instructors Ranked by Course Interaction (CI)*

<table>
<thead>
<tr>
<th>Candidate / Category</th>
<th>Aggregate Average Rating</th>
<th>Course Interaction</th>
<th>Organization and delivery of synch sessions</th>
<th>Facilitation of online discussions</th>
<th>Availability during chat sessions</th>
<th>Responsive to emails</th>
<th>Timely and regular feedback in gradebook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davina</td>
<td>3.96</td>
<td>3.90</td>
<td>3.91</td>
<td>3.90</td>
<td>3.83</td>
<td>3.83</td>
<td>3.96</td>
</tr>
<tr>
<td>Leighton</td>
<td>3.63</td>
<td>3.51</td>
<td>3.69</td>
<td>3.63</td>
<td>3.80</td>
<td>3.63</td>
<td>3.63</td>
</tr>
<tr>
<td>Simon</td>
<td>3.63</td>
<td>3.75</td>
<td>3.59</td>
<td>3.67</td>
<td>3.78</td>
<td>3.46</td>
<td>3.46</td>
</tr>
<tr>
<td>Ludwig</td>
<td>3.72</td>
<td>3.61</td>
<td>3.61</td>
<td>3.42</td>
<td>3.89</td>
<td>3.72</td>
<td>3.72</td>
</tr>
<tr>
<td>Yosef</td>
<td>3.45</td>
<td>3.64</td>
<td>3.70</td>
<td>3.56</td>
<td>3.48</td>
<td>3.45</td>
<td>3.45</td>
</tr>
<tr>
<td>Hadrian</td>
<td>3.66</td>
<td>3.56</td>
<td>3.52</td>
<td>3.56</td>
<td>3.68</td>
<td>3.66</td>
<td>3.66</td>
</tr>
<tr>
<td>Dominik</td>
<td>3.52</td>
<td>3.47</td>
<td>3.50</td>
<td>3.66</td>
<td>3.52</td>
<td>3.49</td>
<td>3.49</td>
</tr>
<tr>
<td>Karissa</td>
<td>3.40</td>
<td>3.49</td>
<td>3.67</td>
<td>3.49</td>
<td>3.40</td>
<td>3.22</td>
<td>3.22</td>
</tr>
<tr>
<td>Pavia</td>
<td>3.34</td>
<td>3.54</td>
<td>3.56</td>
<td>3.54</td>
<td>3.30</td>
<td>3.29</td>
<td>3.29</td>
</tr>
<tr>
<td>Solomon</td>
<td>3.34</td>
<td>3.31</td>
<td>3.37</td>
<td>3.34</td>
<td>3.44</td>
<td>3.34</td>
<td>3.34</td>
</tr>
<tr>
<td>Yves</td>
<td>3.07</td>
<td>3.24</td>
<td>3.31</td>
<td>3.19</td>
<td>3.35</td>
<td>3.30</td>
<td>3.07</td>
</tr>
</tbody>
</table>

Recognizing that a total of 11 participants exceeded the recommended sample size for this qualitative study, the researcher considered whether the two criteria used in selection were sufficient to identify the candidate instructors as successful or effective, particularly due to the fact that some of the candidates fell below the aggregate average.
scores for the categories of evaluation. Reflecting on the selection criteria used in the study conducted by Baran et al. (2013), the researcher revisited the institution’s practices related to the evaluation of instructor performance and identification of successful instructors. Given the institution primarily used ratings on contribution to learning as a course characteristic to measure the relevance and rigor of courses taught by individual instructors, the researcher focused on the evaluation criteria more closely related to faculty performance.

Using the four categories in the evaluation of performance, the researcher performed a final analysis of the original 12 eligible instructors, calculating an average performance score for the four categories to determine which candidates emerged using the institution’s values as the criteria for success. The analysis essentially confirmed six candidates as strong subjects for the study, revealing their exceptional performance across all categories of evaluation, exceeding the average performance score in each category evaluated. After reviewing the individual scores for each of the four categories, it was determined that Simon would be a potential pilot case, given that he exceeded the average performance score for all categories except for one, student centered approach. Two other candidate instructors, Ludwig and Hadrian, underwent further evaluation for eligibility due to the proximity of their average performance score to the aggregate average performance score. It was determined that only Ludwig would be included as a potential pilot case, due to his exceptionally high scores in two of the four categories of performance, course interaction and teaching practices. Table 6 displays the results of this analysis ranking instructors by the average performance score and scores for each of the four categories.
Table 6

**Candidate Instructors Rated by Institution Values**

<table>
<thead>
<tr>
<th>Criterion / Candidates</th>
<th>Average Performance Score</th>
<th>Course Interaction</th>
<th>Teaching Practices</th>
<th>Student Centered Approach</th>
<th>Effectiveness Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate Average Rating</td>
<td>3.53</td>
<td>3.44</td>
<td>3.56</td>
<td>3.60</td>
<td>3.51</td>
</tr>
<tr>
<td>Davina</td>
<td>3.89</td>
<td>3.90</td>
<td>3.87</td>
<td>3.86</td>
<td>3.93</td>
</tr>
<tr>
<td>Karissa</td>
<td>3.77</td>
<td>3.49</td>
<td>3.83</td>
<td>3.89</td>
<td>3.86</td>
</tr>
<tr>
<td>Leighton</td>
<td>3.67</td>
<td>3.65</td>
<td>3.64</td>
<td>3.74</td>
<td>3.66</td>
</tr>
<tr>
<td>Yosef</td>
<td>3.61</td>
<td>3.57</td>
<td>3.61</td>
<td>3.70</td>
<td>3.57</td>
</tr>
<tr>
<td>Dominik</td>
<td>3.61</td>
<td>3.53</td>
<td>3.63</td>
<td>3.75</td>
<td>3.53</td>
</tr>
<tr>
<td>Pavia</td>
<td>3.57</td>
<td>3.48</td>
<td>3.64</td>
<td>3.63</td>
<td>3.53</td>
</tr>
<tr>
<td>Simon</td>
<td>3.60</td>
<td>3.65</td>
<td>3.59</td>
<td>3.57</td>
<td>3.62</td>
</tr>
<tr>
<td>Ludwig</td>
<td>3.48</td>
<td>3.63</td>
<td>3.72</td>
<td>3.28</td>
<td>3.28</td>
</tr>
<tr>
<td>Hadrian</td>
<td>3.47</td>
<td>3.54</td>
<td>3.51</td>
<td>3.33</td>
<td>3.48</td>
</tr>
<tr>
<td>Yves</td>
<td>3.37</td>
<td>3.24</td>
<td>3.46</td>
<td>3.40</td>
<td>3.38</td>
</tr>
<tr>
<td>Solomon</td>
<td>3.43</td>
<td>3.36</td>
<td>3.45</td>
<td>3.53</td>
<td>3.37</td>
</tr>
<tr>
<td>Madeira</td>
<td>3.23</td>
<td>3.15</td>
<td>3.15</td>
<td>3.49</td>
<td>3.14</td>
</tr>
</tbody>
</table>

As a result of this final analysis, the group of instructors selected for the collective case study included: Davina, Dominik, Karissa, Leighton, Pavia, and Yosef. The two instructors selected as potential pilot case study subjects were Ludwig and Simon.

**Participant Recruitment and Informed Consent Process**

An important step in the process of recruiting participants was to have access to study subjects and establish a rapport with the participants so that accurate and meaningful data was collected (Creswell, 2013). As has been previously disclosed in this document, the prospective participants were known to the researcher. Due to the nature of the in-depth interviews that were conducted and recorded, participants were made aware of time commitments and privacy issues that existed. Recruitment of the participants was supported by the research site. Once the prospective participants were identified, the current Dean at the institution sent an initial email to the selected instructors. The email
alerted instructors to forthcoming contact from the researcher regarding involvement as potential study participants. This email informed them of the voluntary nature of participation, stating specifically that there were no ramifications for non-participation.

Following the email from the Dean, the researcher sent individual emails to the selected instructors inviting them to participate in the study opportunity. Instructors were requested to respond if they were interested in participating. A follow-up email to those indicating an interest in participation was sent by the researcher, with the approved Informed Consent Document attached. The email informed instructors of the structure of the interview process, the expected time requirements of the study, and the requirement of a signed Informed Consent Document. All of the contacted instructors agreed to participation in the study and returned signed Informed Consent Documents.

**Data Collection**

Data collection in case study research is extensive and draws from multiple sources of information for the purposes of data accuracy, validity and reliability (Yin, 2014). Typically a researcher will collect data from more than one source, using personal interviews, online data gathering, or archival data as resources for collection (Creswell, 2013). For the purposes of this study, the researcher relied on in-depth semi-structured interviews as the primary source of data. However, student evaluation data provided by the institution were used to produce convergent evidence of the activities reported by the instructors in the interviews and served as a means of triangulation, providing support for the accuracy and interpretation of the information collected (Stake, 2006).
**Instrument Development and Validation**

In qualitative interviews the researcher acts as the data collection instrument; however, as a novice interviewer, the researcher heeded the recommendation that an interview guide of four to five questions be developed to ensure key data elements were covered and collected (Creswell, 2007). Although Seidman (2006) cautioned researchers about the need to remain flexible during the interview and avoid interrupting or diverting a participant’s reconstruction of an experience for the sake of using an interview guide, the researcher found these guides to be extremely helpful in the completion of data collection efforts. Appendix B contains the final version of the interview guide for each of the interview segments for the study.

In the semi-structured interviews it was important to use a variety of question types to elicit robust accounts from the subjects (Smith et al., 2009). Table 7 provides a summary of the types of questions typically used within in-depth interviews and examples of how they were used in this study.

As a novice interviewer, the researcher also heeded the suggestion by Yin (2014) that a pilot case be selected to refine the data collection plans with respect to both the content collected and procedures to be followed. Creswell (2013) suggested the pilot participant be selected for convenience, and supported the benefits of conducting pilot case analyses. Of the identified participants, two instructors were identified and selected as pilot case studies for the purposes suggested by Yin. The results of these pilot cases were primarily for methodological purposes, and were not utilized in the results of the collective case (Yin, 2014). The researcher found the use of these pilot cases to be
extremely helpful in familiarizing herself with the interview process, but also in the utilization of the Nvivo software during the analysis phase of the project.

Table 7

*Question Types in In-Depth Interviews*

<table>
<thead>
<tr>
<th>Question Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive</td>
<td>Please describe what “being present” in an online class means to you.</td>
</tr>
<tr>
<td>Narrative</td>
<td>Tell me about how you came to become an online teacher.</td>
</tr>
<tr>
<td>Structural</td>
<td>What actions do you take in creating your presence in the online classroom?</td>
</tr>
<tr>
<td>Contrast</td>
<td>What are the main differences between the presence you have in the classroom at the beginning of the term and at other times during the term?</td>
</tr>
<tr>
<td>Evaluative</td>
<td>What actions most greatly contribute to collaborative learning and why?</td>
</tr>
<tr>
<td>Circular</td>
<td>What do you think your students think about why you are present in the discussions?</td>
</tr>
<tr>
<td>Comparative</td>
<td>When you compare the different institutions where you teach, what are the main differences in the teaching environments?</td>
</tr>
<tr>
<td>Prompts</td>
<td>Can you explain that a little more for me?</td>
</tr>
<tr>
<td>Probes</td>
<td>Why do you think you that works?</td>
</tr>
</tbody>
</table>

*Data Collected through Semi-Structured Interviews*

Interviewing is a key component of most qualitative research and can range from very structured questioning of a participant to flexible unstructured conversations (Willis, 2008). The goal of the semi-structured interview in this study was to elicit meaningful and descriptive first-person accounts of the experiences of the participants (Smith et al., 2009). Using the semi-structured interview technique to provide a flexible approach to discovery, the researcher explored the experiences of the instructors and the intentions of their actions.

Seidman (2006) recommended an approach for in-depth phenomenological interviews which broke the interview into three distinct parts: life history, details of the
experience, and reflection on the meaning of the experience. By separating the interview into these three components, Seidman contended that both the researcher and participant could maintain a sense of focus and reduce the temptation to interpret in situ or steer the interview to the next area before a full description of the experience could be explored.

In keeping with Seidman’s approach, this study followed a three segment interview series. Following Seidman’s suggestion, each segment was allotted a 90-minute window for the topics to be covered, and participants were asked to ensure they were available for that period of time.

The semi-structured interview for each segment had the intent of gathering data on the following topics as outlined in the Interview Guides (see Appendix B):

1. Life History: Demographic information, educational background, professional background, interest in teaching, background in online teaching, training in online teaching, experience in structured delivery programs, experience at research site.

2. Details of Experience: Pre-term activities, first day activities/first week activities, types of interactions with students, academic expectations, differences from end of module activities/mid-term activities/end of term activities.

3. Reflections on Meaning: Meaning of presence, intentions related to activities/level of presence/level of rigor, perception of teaching presence/effectiveness, reflections on structured environment, reflections on student response to presence/influence on intellectual climate.
Due to the varied locations of the instructors teaching for the research site, the interviews were scheduled and conducted over the phone using a web-based service freeconferencecall.com. The participants were asked to ensure they were available to make the call in a place free from distraction. The researcher conducted the call from her home office, where the call was completely private. In order for the interviews to be recorded in audio format, verbal consent of the participant was required at the onset of each interview segment to be in compliance with Maryland state laws. Preparation for the interview was an important part of its success (Smith et al., 2009). Following a consistent procedure to begin each interview segment ensured the participant was informed and aware that the interview was underway. Although the participant took part in three subsequent sessions, each session had a different purpose, so the researcher performed the same steps with each interview session. These steps were as follows:

1. Requested verbal consent of participant that recording was acceptable and commenced audio recording;
2. Explained the purpose of the interview;
3. Addressed terms of confidentiality;
4. Explained the format of the interview;
5. Indicated how long the interview would take;
6. Explained the procedure that would be followed if the interview call was terminated or interrupted unexpectedly;
7. Allowed the participant to get clarification on any concerns or doubts about the interview or research project; and
8. Began interview and note taking.
This introductory script took approximately three to five minutes, and ensured that the participant was focused on the interview from the onset. Individual interview sessions ran from 35 minutes to 90 minutes depending on the session topic and the instructor interviewed. Interviews varied greatly; some instructors answered questions in a concise and direct manner, some were meandering in their responses but informative and reflective, while others were reticent in their responses and needed to be probed to elicit substantive answers.

*Data Collected through Other Sources*

The research site provided other sources of data that were used during the study. Data were downloaded from the eCollege learning management system by a staff member at the research site and provided to the researcher. These records were associated with courses taught during the period from January 2010 through December 2012 and included the following:

1. End of Term Evaluations: Student evaluation results were made available for each term during the designated period, aggregated at a course level. Data for all master level courses taught during each term were made available. Only data related to questions using ratings were provided, answers to open ended questions were not provided. This data was utilized in the participant selection process.

2. Asynchronous Discussion Activity: Posting activity information for all threads (graded and non-graded) for each course for each term during the designated period were provided. Data included both student and instructor posting activity rates. This information was used in verifying instructor activity,
providing anecdotal information, but was not used for the purposes of reporting results of the study.

3. Asynchronous Discussion Transcripts: Discussion thread transcripts for all courses were exported in PDF format to provide additional supporting evidence. This information was not used in the study.

4. Synchronous Session Activity: Synchronous session durations for each course for each term during the designated period were provided. This information was not used in the study.

Data and Participant Confidentiality

The study relied significantly on the stories of individuals as they described their experiences in their online classrooms. The Informed Consent Document identified for the participants the potential risks of confidentiality associated with the nature of the audio recording of the interviews. During the introductory script of each interview session, participants were reminded of the potential risks of confidentiality and provided an opportunity to raise any questions or doubts concerning the research project. Each participant was given an opportunity to discontinue participation in the project at that juncture without penalty.

Participants in the study had the right to expect that the researcher would take steps to ensure their identities would continue to remain confidential and not be revealed (Seidman, 2006). The researcher considered methods by which the participant could be uniquely identified with respect to the interviews without risking confidentiality or individual identification (Creswell, 2013). To minimize the risk of breaching confidentiality, the researcher used a pseudonym to identify each study participant. In
this final report, all references to an individual participant use the pseudonym selected by
the researcher.

Data files that were generated and linked to an individual participant as part of
this study included interview audio files, interview transcription files, interview note
files, data analysis files, student evaluation files, course related activity files and
discussion thread content files. Using a consistent approach to assigning the pseudonym,
a file-naming convention was utilized for each file type to ensure files could be identified
by participant without risking identity disclosure. Using the first initial of the last name to
select the pseudonym created an unlikely link to the participant’s name. Table 8 below
provides an example of how the pseudonym was used in assigning file names for the
participant.

Table 8

Example of Pseudonym Assignments

<table>
<thead>
<tr>
<th>Participant Name</th>
<th>Pseudonym Assigned</th>
<th>Audio Filename</th>
<th>Transcript Filename</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janice Orcutt</td>
<td>Odessa</td>
<td>Odessa-AUD-session1</td>
<td>Odessa-TRAN-session1</td>
</tr>
<tr>
<td>Theresa Haney</td>
<td>Helga</td>
<td>Helga-AUD-session1</td>
<td>Helga-TRAN-session1</td>
</tr>
</tbody>
</table>

Student evaluation data and course activity data was provided in aggregate form.
These files were named based on course number and term. For example, the file for the
course IA7020 taught in the January 2012 term was named IA7020J12 and stored in a
folder labeled Jan2012. Within each file the pseudonym naming convention was used,
replacing the instructor name in specific headings in the data forms with the assigned
pseudonym.
Discussion thread transcripts were provided in PDF format and therefore could not be modified to protect the identity of instructors or students. Due to this fact, these files were password protected when stored on an external hard drive for this project. The password is known only to the researcher.

Although the text-based files could be de-identified using the pseudonym, when interviews are recorded, confidentiality could not be guaranteed as the individual risked identification through voice recognition or by being personally identified by name on the recording. The audio files were captured as a downloadable file in a PC-based format during the interview by the service freeconferencecall.com. Audio files were downloaded and saved as MP3 files following the interview and deleted from the service after confirming the file’s integrity. The content of the audio files were transcribed within the Nvivo software, and exported as Microsoft Word files for use in analysis. The individual audio files were then password protected and saved on the external hard drive for the project.

All digital files were password protected, using a password known only to the researcher, and stored on a non-server environment on an external hard drive purchased solely for dissertation work by the researcher. All files will be retained by the researcher for a period of three years (36 months) after publication of the final report, as required for IRB audit purposes. After that period, the files will be deleted from the hard drive, and the hard drive will be reformatted. Any paper-based data files, such as signed Informed Consent documents, will be shredded at that time.

The researcher created the key of the pseudonym assignments separately from the research materials, and destroyed it upon completion of the analysis. Similarly the
passwords used for individual files were recorded separately from the research materials. The password key file will be maintained by the researcher for the three year period, and will be destroyed when the data files are destroyed.

**Reflexive Bracketing and Journaling**

Because the goal of the interview was to obtain an accurate first-person account of the experiences being described, there was a significant effort made to remove the individual preconceptions, opinions, or interpretations of the researcher from the interview (Seidman, 2006). Qualitative research requires the researcher to not only adopt an “insider’s perspective” of the experience, but also to maintain an observer’s position in the analysis and interpretation of that perspective (Smith et al., 2009). As a result, this study involved a “double hermeneutic” where the researcher was making sense of the participant who was making sense of their experiences and feelings. This duality can create concerns that the researcher’s viewpoint may overtake the participant’s viewpoint during the interview or the data analysis.

During the process of phenomenological reduction, the researcher needed to focus on the instructors’ experiences described and their relative meanings, in order to describe them in textual language (Conceição, 2006). The process of removing the researcher’s understandings, prejudgments, or biases about the phenomenon of interest is referred to as bracketing or epoché (Sokolowski, 2000). Because the accurate interpretation of the first-person account was the intention of the study, the researcher took steps during the interview and analysis phases of the project to ensure that bracketing occurred. This process was best supported through the creation of a personal journal in which the researcher recorded thoughts, opinions, and ideas that related to the research project and
could have affected the interpretation of the research data (Smith et al., 2009). In addition, the transcripts of interviews were shared with participants during the member checking process, in order to ensure accuracy of data and remove any form of bias or misinterpretation interjected by the researcher (Willis, 2008). As will be described in the section under the sub-heading Data Analysis, the selected approach to data analysis specifically dealt with bracketing as a step in the analytical process.

**Data Analysis**

The in-depth interview techniques used in data collection supported the exploration of instructor’s intentions, actions, and perceptions when establishing their presence in the online course environment. A typical procedure utilized in data analysis in collective case studies is to first conduct within-case analyses, providing detailed descriptions and theme identification within each case, followed by a cross-case analysis which involves thematic examination across all cases (Creswell, 2013). Interpretative Phenomenological Analysis (IPA) is an experiential qualitative research method which provides a systematic approach to interpreting first person accounts of experiences (Smith et al., 2009). This approach is not a predictive evaluation tool, but rather a pragmatic method used to describe, explain and interpret patterns and themes that emerge from the narratives resulting from in-depth interviews. IPA was the analytical approach used in this research study to address the concerns of rigor.

Analysis of data in a case study can either be holistic (looking at the entire case) or embedded (focusing on specific aspects of the case). The design of this case was considered embedded given the analysis was focused on a subset of the experiences of
the instructor in the online teaching experience. The objective of the analysis of the qualitative data collected in this case study was to identify patterns in data and draw them into some form of structure as well as to produce a narrative account of the structure (Smith et al., 2009). IPA requires a verbatim record of the interviews so that interpretation of the content can be performed. Therefore, the first step of analysis involved the accurate transcription of the interviews. After transcription was confirmed for accuracy, the coding of data was extremely important, in order to capture the patterns of meaning (Creswell, 2013; Smith et al., 2009; Yin, 2014). Again, the IPA method offered a rigorous approach to this important phase of data analysis as is described in the sub-subsection titled *Analysis of Data*.

Ultimately, the goal of utilizing the analytical process in IPA was to engage both the researcher and participant in order to produce a reflective interpretation of the participant’s lived experiences (Smith et al., 2009). Following the IPA method supported an accurate and meaningful interpretation of the experiences being explored. It was due to the depth of this analysis derived by following the IPA protocols during analysis of the qualitative data collected, a detailed description of each case emerged, allowing the researcher to identify themes that repeated within the case which helped develop a greater understanding of the complexity of the issue being studied (Creswell, 2013). After the individual analyses for the subject cases were completed, IPA offered a method to complete the identification of patterns across cases, providing results as a collective case.

*Transcription*

While note-taking was performed by the researcher during the interview, the audio recording allowed for an accurate word-for-word transcription to be constructed
Although transcription of the interview is often viewed as a behind-the-scenes activity, it was an important first step in the analysis of data (Oliver, Serovich, & Mason, 2005). A detailed and accurate transcript recreated the verbal and non-verbal material of the interview so that the researcher could access the information repeatedly without distortion (Seidman, 2006).

There are two dominant forms of transcription, naturalized and denaturalized, and the decision of which approach to use was made based on the inclusion of participants in member checking (Oliver et al., 2005). In a naturalized transcript every utterance and vocalization is recorded, providing insight into actual speech patterns between the interviewer and participant, but often producing negative reactions from participants concerned with how they are perceived in the extracted segments of conversation. The denaturalized transcript focuses on the content of the interview shared during the conversation and therefore omits some of the utterances or repeated segments of speech. Because the IPA protocol utilizes multiple note-taking views during the analysis of transcripts, this researcher elected to use the denaturalized transcript for use in member checking.

Transcribing audio tapes was a time consuming activity, with an estimated time of six to eight hours required to transcribe a 90 minute tape (Seidman, 2006). The researcher transcribed the contents of each interview using the Nvivo software for audio playback. The transcript was then exported and stored as Microsoft Word files, utilizing a file naming convention that was linked to the participant’s pseudonym as described earlier.
Analysis of Data

Following the IPA protocol, the researcher individually analyzed each case thoroughly prior to performing the cross-case analysis. For each case the researcher completed the following five steps of the IPA method as outlined by Smith et al. (2009):

1. Reading and re-reading transcripts.
2. Initial noting.
3. Developing emergent themes.
5. Moving to the next case.

The first step of the protocol required the researcher to become immersed in the original data using the source documents. Due to the nature of the interviews this transcription process produced three source documents for each participant of the study. Given the data was collected in the form of interviews which were recorded this involved reading and re-reading the transcripts as well as listening to the audio recordings. Smith et al. (2009) recommended a specific sequence of immersion into the data, which the researcher followed:

1. Listen to the audio recording.
2. Listen to the audio recording while reading the transcript.
3. Read the transcript while imagining the voice of the participant.
4. Re-read the transcript to increase familiarity with the interview.

During each step the researcher recorded notes which included recollections of the interview experience, observations about the transcript, or personal opinions and perceptions that needed to be bracketed. Repeated reading allowed the researcher to
identify how the participant associated different components of the interview with each other and facilitated the ability to identify contradictions, tone and rapport. These notes were saved as Microsoft Word files.

The second step, initial noting, was the most time consuming of the analytical process and was comprised of an exhaustive three part procedure of commenting which includes (a) descriptive interpretation, (b) observation of linguistic usage, and (c) notation of conceptual questions that arise during interpretation. This stage of analysis was described by Smith et al. (2009) as “free textual analysis (pg. 83)” with the goal of producing descriptive comments about the meaning of the phenomenon or experience to the participant. The descriptive interpretations helped the researcher understand these meanings, and notations about the use of language, context or abstract concepts helped identify patterns in the narrative.

While Smith et al. suggested there are no rules in identifying specific units of content for noting, either in size or need for comment, the researcher felt that meaningful units of content needed to be identified for analysis. As noted by Chenail (2012a) a common approach is a line-by-line analysis of the transcript, but he contended that line-by-line unit of analysis may not always represent a suitable unit of data that is meaningful and suggested that the unit of content to be analyzed would likely vary, such as a complete sentence or thought. Chenail recommended a simple method of tagging the transcripts in the Microsoft Word file to demonstrate the level of rigor used during the transcript analysis. Following the three step commenting process of IPA, the researcher incorporated the recommendation of Chenail (2012a) during the analysis process to ensure the most accurate interpretation and analysis of the data. Taking the textual
transcript, the researcher divided the responses to each question into individual units based on what was interpreted by the researcher as a complete thought or idea, and then, working through the three step noting process made comments as suggested by the protocol. Table 9 displays an example of the comments made for an excerpt from one of the interviews during the pilot case with Ludwig.

Table 9

Sample of Initial Noting

<table>
<thead>
<tr>
<th>Question Posed:</th>
<th>Response</th>
<th>Descriptive Interpretation</th>
<th>Linguistic Usage</th>
<th>Conceptual Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>So can you describe anything specifically that led you to get into teaching and about when in your career did that happen?</td>
<td>Professional development training for 10 years in face to face format on an occasional basis</td>
<td>“sage on the stage”</td>
<td>Does he see himself as an expert dispensing knowledge?</td>
</tr>
<tr>
<td></td>
<td>Well I had been teaching professional classes, not online but the “sage on the stage”, for probably ten years or so … from time to time where we had a group of people who needed to learn something and everybody would ask me to go and teach them…</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>… and so after finishing my PhD it just seemed like a natural thing to do to formalize some of the teaching aspects of what I had been doing in my career all along…</td>
<td>Teaching considered after completion of PhD</td>
<td>Teaching was a “natural formalization” of career based activities</td>
<td>Was it the credential that gave him credibility as an instructor?</td>
</tr>
<tr>
<td></td>
<td>I think my natural inclinations are to try to help people to succeed and that’s probably one of the motivations for me to decide to go into teaching because in a sense I’ve been mentoring people for the last few decades.</td>
<td>Motivated by helping people succeed through mentoring, sees teaching as a means to help people succeed.</td>
<td>“natural inclinations are to help”</td>
<td>Does he equate teaching with mentoring?</td>
</tr>
</tbody>
</table>

Content analysis was the next task in the protocol, with the primary goal of extracting themes or patterns among the data collected (Yu, Jannasch-Pannell, & DiGangi, 2011). In this third step, the researcher was challenged with reducing the
volume of data while maintaining the complexity of the connections and patterns that were expressed. During this step the focus was in producing discrete thoughts or topics which concisely reflected pieces of the transcript. While this process was undertaken by the researcher, it ultimately needed to capture and reflect the participants’ original words and thoughts (Smith et al., 2009).

During the process of content analysis, the researcher was challenged to transform the data collected for each case into informational codes that helped categorize the data (Chenail, 2012b). Using either in vivo codes (words drawn directly from the transcript) or descriptive codes (generic or conceptual codes drawn from the discipline or literature), the researcher needed to recognize qualities within the transcript which indicated a theme or pattern.

The Nvivo software provided the researcher with substantial capability in performing this step of the protocol. By importing the notated transcript files from the three interview sessions for each case independently, the source data could be categorized using the node functionality within the software. Following the IPA method, the comments and notes were methodically analyzed to produce a set of themes or nodes in chronological order, based on how they emerged in the interview.

After all three source documents were analyzed, the researcher reviewed the nodes for similarities and repetition, re-reading coded excerpts to determine if upon reflection the coding used seemed accurate. The analysis performed for the pilot cases helped generate a basic set of codes that were used by the researcher at this stage of the study. However, as the analysis of the individual cases progressed, the researcher became more experienced in the coding stage of analysis, expanding the set of codes used. After a
few iterations, the researcher was comfortable with the level of consistency found in the coding structure that was generated.

The internal validity of the data can be particularly affected by the researcher during the coding phase, which is a subjective process (Diefenbach, 2009). Diefenbach suggested that this could be addressed by using multiple coders to ensure comparable results in coding it would require similar levels of understanding of the topic under investigation. While the Nvivo software helps in providing transparency of the decision making process through the logs maintained in the system, member checking can provide a reasonable alternative in ensuring the validity of interpretation. It was at this stage during this project member checking was employed to effectively ensure an accurate interpretation of the participants’ account of their experiences and test the categorization choices of the researcher. This is discussed later under the subsection *Quality Control*.

Using the set of themes developed in the third step, the fourth step was to find connections among the themes that emerged by mapping or charting the themes based on some criteria of similarity or fit. Keeping the research questions of the study in mind, the analysis was conducted in five stages:

1. Analysis of activities undertaken in establishing presence using temporal references associated with the phases of course delivery;

2. Analysis of actions related to establishing teaching presence without the temporal lens applied;

3. Analysis of the intentions of the instructors as they revealed the reasons behind the actions taken when establishing teaching presence;
4. Analysis of themes associated with practices related to setting academic climate

5. Analysis of themes associated with practices related to inspiring intellectual curiosity

The goal of step four was to produce a structure which illustrated the most interesting and important aspects of the participant’s account. There are a number of approaches commonly used to group themes, none of which are mutually exclusive and often used in combination (Smith et al., 2009). For the purposes of this study, the researcher found that the use of techniques such as subsumption (grouping related themes and identifying one as superordinate) and numeration (identifying themes based on frequency of occurrence as a reflection of importance and relevance to the participant) were the most helpful in generating a visual schematic of the themes that emerged from the interviews.

It was during this step that the Nvivo software product provided support to the researcher in the process of extracting useful information and identifying patterns within the transcript (Yu et al., 2011). Utilizing the modeling capabilities within the software allowed the researcher to recognize natural groupings among the coding and identify relationships within the nodes. The capability of cluster analysis available within the software was particularly helpful to the researcher during the evaluation of the groupings and was used in creating the graphical representations of their relationships.

In step five, the researcher was ready to move to the next case having successfully coded and identified the themes of the case. However, at this point, the researcher had to knowingly create a separation from the case and set aside, or bracket, ideas emerging
from the case that was just completed so that it did not influence the analysis of the next case. To do this, the researcher recorded any ideas, thoughts, or concerns in the research journal that had arisen as a result of the process that had been undertaken for the case under review. Because the researcher held a demanding full time position, it was often that a few days or more would elapse between the analyses of individual cases, providing further separation from the data coding between cases. The researcher repeated steps one through five with the next case until all individual cases had been coded and themes had been individually extracted and identified.

To complete the collective case study analysis, the researcher then completed the sixth step of the IPA protocol: looking for patterns across cases. This last step of analysis involved the identification of themes that were common across the cases, as well as patterns and connections that led to a deeper understanding of the intent, actions and perceptions being investigated. During this phase of analysis themes from each case are evaluated for recurrence across all cases and grouped based on relevance, relationship to each other, and interpretation. The approach for cross-case analysis suggested in the IPA method is to align the themes of each case in a tabular fashion to visually identify recurrent or major themes across cases (Smith, et al., 2009). Using this approach to analysis, a theme was required to have been present in the results of more than half of the cases, or four out of the six subject cases, in order to be considered recurrent. Following the same process of analysis as used in the individual cases, this analysis provided a view of the collective case as a singular entity, rather than a compilation of individual reports.

The researcher utilized the data collected from the six subject cases for the analysis of the collective case. In addition to looking for points of convergence and
commonality in themes, this step of analysis also allowed the researcher to identify areas of divergence and individuality. It is from this final analysis the findings of the study are derived and the final report was produced.

**Presenting Results**

As was previously stated, case studies involve the collection of significant amounts of data. The purpose of the presentation of data is two-fold: to communicate the data that were collected and to offer an interpretation of that data (Smith et al., 2009). During the interviews, participants shared their personal accounts of experiences and perspectives of teaching presence and it was important for the researcher to provide evidence of those perspectives and the process of interpretation (Yin, 2014). These perspectives are shared by selecting and presenting relevant extracts from transcripts that enable the reader to arrive at an independent conclusion about the interpretation made by the researcher (Smith et al., 2009). The presentation of the case was organized in a way that contributes to a reader’s understanding of the case and the interpretations made by the researcher (Stake, 1995). The goal of this report was to describe the study in as comprehensive a manner as possible but in a format that is readily understood by the reader (Baxter & Jack, 2008). Stake (1995) suggested three approaches which continue to be the most commonly used: developing the case chronologically, telling the reader a story, or organizing the report by identified themes. Baxter and Jack (2008) suggest that novice researchers follow the theme orientation to ensure the writing remains focused on the research questions. For the purposes of this study, the researcher chose to organize the report by identified themes as they relate to the research questions, first detailing the
individual case results, and then the collective case results. While the pilot case reports were helpful to the researcher in developing this approach, the results and reports from the pilot cases are not included in the collective case (Yin, 2014).

For the individual cases, the results are organized and presented for each case in the following order:

1. Participant Profile: This section provides the reader with demographic information collected about the subject case, specifically focused on items related to the study, such as background in online environments and prior teaching experience.

2. Interpretation of Narrative: This section provides a summary and interpretation of key interview topics with the subject case, utilizing extracts of the interview as examples or for purposes of clarification.

3. Emergent Themes - Category Identification: This section, using graphics generated from the data, reports the themes identified during the five steps of analysis conducted.

The report on the results of the collective case follows the same format, but the results are labeled in the following ways to differentiate them from individual cases:

1. Collective Profile: This section provides the reader with similarities found in the demographic information collected about the subject cases, specifically focusing on characteristics which may indicate reasons for their success.

2. Patterns in Narrative Themes: This section provides a summary of similarities found in the interpretations of the narratives not addressed in the pattern identification process.
3. Emergent Themes – Pattern Identification across Cases: This section, using graphics generated from the data, reports the recurrent themes identified during the five steps of analysis conducted.

Quality Control

Credibility of qualitative research is dependent on rigorous techniques and methods during data collection and analysis, the credibility of the researcher, and the value of the qualitative inquiry undertaken (Patton, 1999). As with any research study conducted, the results and conclusions of the study are evaluated for reliability and validity (Yin, 2014). Four tests are commonly used to establish the quality of empirical research: construct validity, internal validity, external validity and reliability. Yin (2014) recommends specific tactics during each phase of case study research in performing these tests for quality as indicated in Table 10.

Table 10

<table>
<thead>
<tr>
<th>Research Phase</th>
<th>Quality Test</th>
<th>Tactic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Design</td>
<td>External Validity</td>
<td>Use replication logic for multiple cases</td>
</tr>
<tr>
<td>Data Collection</td>
<td>Construct Validity</td>
<td>Use multiple sources of evidence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Establish chain of evidence</td>
</tr>
<tr>
<td></td>
<td>Reliability</td>
<td>Use case study protocol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Develop case study database</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>Internal Validity</td>
<td>Do pattern matching</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Do explanation building</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Address rival explanations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use logic models</td>
</tr>
<tr>
<td>Documentation</td>
<td>Construct Validity</td>
<td>Key informants review draft report</td>
</tr>
</tbody>
</table>
In order to ensure these concerns were addressed, accuracy and quality in procedures and processes were required. In qualitative studies whereby a participant is sharing personal reflections and perceptions, the ability to measure their accuracy and validity is a difficult task compared to evaluating the accuracy and validity of quantitative data. The opportunity for miscommunication between researcher and participant in qualitative studies can create problems for the trustworthiness or credibility of the research (Carlson, 2010). Sokolowski (2000) discusses this in the form of two kinds of truth. He contends that in phenomenological studies researchers must consider the “truth of correctness” which allows confirmation of the content of claims made, as well as the “truth of disclosure”, in which researchers must take at face value that which is described. It is through the process of multiple interviews conducted, that patterns of “truth” emerge, which allows for the accurate interpretation of the experiences described by the participants.

*Construct Validity*

The test for construct validity required that the researcher identify operational measures that match the concepts that define the construct being studied (Yin, 2014). For this case, the construct of teaching presence has been defined by the CoI framework to be represented by activities related to interactions with students supporting direct instruction and facilitation of discourse. Themes and evidence that demonstrate this construct are discussed in Chapter 4 to increase the construct validity of this study.

*Internal Validity*

The test for internal validity is concerned with the problem of inferences made from the interpretations made from data collected primarily through interviews (Yin,
Trustworthiness in qualitative research signifies that the researcher has ensured that data were appropriately and ethically collected, analyzed and reported. When data are considered trustworthy, the research project has a higher probability of being accepted as credible, authentic and plausible (Carlson, 2010). Creswell (2007) suggests that incorporating procedural strategies that improve internal validity also increases the accuracy of findings. Carlson (2010) suggests the most common procedures for increasing internal validity are:

1. **Audit Trails**: Audit trails provide a source of documentation that allow outside observers to clearly trace the complete path taken by the researcher throughout the research process (Carlson, 2010). The study produced substantial amounts of documentation that provide an audit trail of the research process, as reported in this chapter.

2. **Reflexivity**: One of the most common criticisms of qualitative case studies is that the research process can be biased by the subjective view of the researcher (Diefenbach, 2009). By explicitly stating and acknowledging any assumptions and personal perspectives, the researcher can identify potential issues with interpretations made during analysis. The IPA method consciously engages the researcher in reflexivity in the fifth step of analysis, requiring the journaling activity to intentionally bracket feelings, beliefs, and reactions to reduce the risk of their influence (Smith et al., 2009).

3. **Thick and Rich Description**: The level of detailed description collected during the interviews provides an opportunity to develop corroboration between and among participants in a study (Carlson, 2010). Thick description helps the
researcher ensure that the interpretation of the participant’s account is not only accurate but reflective of commonalities shared among the other participants. This helps the reader of the research immerse themselves in the stories of the participants and have a better understanding of the experiences being related (Creswell, 2007). The depth of description also helps provide an understanding of relevance to other settings, making the accounts of each participant more credible to reader (Carlson, 2010).

4. **Triangulation:** Data provided through an interview may need to be verified through other sources of data (Diefenbach, 2009). The purpose of triangulation is to raise the confidence that the original data collected is true and accurate, and therefore, the interpretations and conclusions drawn are trustworthy and credible (Carlson, 2010). In the process of triangulation, it was important to understand that differences in data do not necessarily invalidate a finding, and that reasonable explanations for differences can contribute significantly to the credibility of the findings (Patton, 1999).

5. **Member Checking:** Member checking is a procedure that allows the participant to review and approve particular aspects of the interpretation of the data. Participant involvement in member checking can range from full transcript review and edit activities on an individual basis to group discussion of theme and pattern interpretations led by the researcher (Carlson, 2010). Carlson recommended that member checking be used as a single event as part of verification of transcripts or early interpretations. Carlson agrees with
Oliver et al. (2005) in recommending that denaturalized or partially interpreted transcripts be used during member checking.

For this study, member checking was used to provide increased internal validity. Participants were sent a copy of the denaturalized transcripts of the three interview segments, and the initial coding of the content of the interviews. While all participants were invited to participate in this process, only one participant responded. The comments of this respondent were that the interpretation was acceptable and consistent with the intended comments.

**External Validity**

The test for external validity rests on whether a study’s findings are generalizable beyond the immediate study, regardless of research method used (Yin, 2014). External validity is a criticism of qualitative research primarily due to the fact that findings are highly context and case dependent, and difficult to replicate (Patton, 1999). However, case studies have the potential of extending beyond just description of a particular place and time due to the complexity of the data collected, particularly when studied in the collective, which can lead to an understanding of an emerging pattern across similar circumstances or situations (Stake, 1995). Inductive in nature, it is possible to formulate hypotheses from the findings of a case which can then be explored and tested for in other scenarios that can lead to the generation of theory, therefore, meeting the test of external validity (Diefenbach, 2009).

Also referred to as “transferability”, Friesen (2009) suggests that when researchers provide sufficient richness of data to enable other researchers to envision the applicability of the data in another context, the study has met the test of external validity.
Given the purposive approach to sample selection, it was incumbent on the researcher to clearly describe the participants and criteria used in selection to ensure an understanding of the scope or the social reality that was being explored (Diefenbach, 2009). This aids readers in drawing conclusions of representativeness or transferability of findings for their own purposes.

**Reliability**

The test for reliability is the demonstration that the operations of the study can be repeated with the same results (Yin, 2014). The study protocol outlined by the IPA method provides a structured approach that ensures a level of documentation is produced which would support this test. Reliability of content analysis is a critical part of judging the quality of research and replicability is a primary means of showing validity of coding (Yu et al., 2011). The systematic evaluation of the data using the IPA method documents a process of interpretation that is reproducible by an outside auditor (Smith et al., 2009).

**Resources Required**

The following resources were required to conduct this study:

1. Access to online instructors at the identified institution. Access to these faculty members had been maintained due to personal relationships formed over the 10 year period of employment. Permission to conduct the study was granted by the institution’s founder and former president. Current administration provided an update to this permission.
2. Recording devices and storage capacity. The resulting files were stored on a non-server environment on an external hard drive purchased solely for dissertation work.

3. A secure and private location where the interviews were conducted. The researcher conducted all interviews from her home office location, which provided for privacy and confidentiality. Participants were asked to ensure their privacy during the interviews.

**Summary**

Teaching presence and its implications for the intellectual climate of an online classroom cannot be fully understood unless explored from the perspective of the instructors who experience it. Framed in the theoretical perspective of the Community of Inquiry (CoI) model, a collective case study was conducted to investigate the actions, intentions and perceptions of instructors to develop an in-depth understanding of the phenomenon of teaching presence as it is established in a structured online learning environment. Building on research conducted in three previous studies, this study identified a context that minimized variability in course design so that instructor actions were isolated and examined. Using semi-structured interviews as the main source of data collection, a series of three in-depth interviews were conducted with each participant to fully explore their actions, intentions and perceptions related to the construct of teaching presence. The study utilized the Interpretative Phenomenological Analysis (IPA) method as an analytical tool to address concerns of rigor in the qualitative interpretation of experiential data. This method incorporated significant documentation of interpretive
decisions and formalizes bracketing as part of the analytical process as a means of ensuring credibility and quality. Individual cases were thoroughly analyzed before the collective case was analyzed for commonalities of themes and patterns. It was the goal of this study to gain an understanding of how teaching presence was established and the decision processes employed in doing so, cataloging practices used by successful instructors in order to make an original contribution to the body of knowledge from a practical pedagogical perspective.
Chapter 4

Results

Introduction

The data were primarily collected through a series of semi-structured in-depth interviews which served the purpose of providing insight into how instructors establish teaching presence and inspire intellectual curiosity within the courses they teach in a structured online environment. Utilizing the Interpretative Phenomenological Analysis (IPA) method, the researcher conducted a thorough analysis of the qualitative data to examine and interpret the accounts of the participants in order to extract and identify meaningful themes related to the research questions that guided the study. During the analysis of interview transcripts and for the purposes of reporting in this chapter, primary importance was placed on capture and identification of themes related to how instructors create teaching presence and the intentions and choices made by instructors while establishing their teaching presence.

This chapter presents the results of the analyses conducted on each of the individual cases and the cumulative results of the collective case. Following the presentation of results, this chapter includes a discussion of findings and a summary of results associated with the research questions guiding the study.
Presentation of Subject Case Results

For the individual subject cases, the results are organized and presented for each case in three subsections: Participant Profile, Interpretation of Narrative, and Emergent Themes - Category Identification. As described in Chapter 3, the analysis of emergent themes for each case consisted of five areas of evaluation including viewing the actions taken when establishing teaching presence through a temporal lens. Each instructor was asked to describe as completely as possible the sequence of activities undertaken when establishing teaching presence. In order to create measurable references for comparative purposes, instructors were asked to separately describe actions taken during four specific phases during the course delivery process:

1. Course Preparation: The time during which the instructor has been assigned the course and has access to the course environment, but students do not have access.

2. Preview Period: The time during which students are given access to the course to preview course materials, but before the official start of the course term.
   Historically this was the Friday and Saturday prior to the course start.

3. First Week of Class: The first seven days (Sunday through Saturday) of the course term.

4. Remainder of Term: The remaining seven weeks of the course.

Presentation of Collective Case Results

The results for the collective case are presented in three similar subsections:

Collective Profile, Patterns in Narrative Themes, and Emergent Themes – Pattern Identification across Cases.
Pilot Cases

As discussed in Chapter 3, the researcher followed the recommendation of utilizing pilot cases to refine the data collection plans with respect to both the content collected and procedures to be followed (Yin, 2014). For this study, two instructors were identified and selected as pilot case subjects for the purposes suggested by Yin. The use of these pilot cases was primarily for methodological purposes. The researcher found the use of these pilot cases to be extremely helpful in familiarizing herself with the interview process, the utilization of the Nvivo software during the analysis phase of the project, and most importantly, the procedures utilized in IPA for interpreting the data and combining those results for the collective case. The results of these pilot cases are not reported in this study and were not utilized in determining the results of the collective case (Yin, 2014). The primary purpose of the pilot cases was for the procedural benefits of analysis, not the interpretive activities, therefore there is no discussion of findings of the pilot cases and their interpretation provided in this report.

Methodological Impact

Conducting these pilot case studies provided the researcher the opportunity to increase the reliability of the formal collective case study by ensuring the data collection protocol would proceed smoothly (Yin, 2014). Using an interview guide developed for each interview segment as recommended by Creswell (2007), the pilot cases provided practice dealing with the procedural uncertainties that might have been encountered while conducting the semi-structured interviews (Seidman, 2006; Yin, 2014). The initial guides consisted of six questions for each interview segment. Upon completion of each interview segment in the first pilot case (Ludwig), the researcher considered items
disclosed and determined if greater clarity was required in how the question needed to be framed, or if particular gaps were created by virtue of the questions asked. These changes were then used in the interview conducted with the second pilot case subject (Simon).

Table 11 provides a summary of the changes made to the interview guides.

### Table 11

*Changes to Interview Guides Resulting from Pilot Case 1*

<table>
<thead>
<tr>
<th>Interview Guide</th>
<th>Issue Identified</th>
<th>Resulting Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1 / Question 1</td>
<td>No question asked about educational background or online educational experiences (information volunteered by Ludwig).</td>
<td>Question added: <em>What about your educational background, can you describe it for me?</em></td>
</tr>
<tr>
<td>Session 1 / Question 5</td>
<td>Confused about ambiguous reference to structured environment: <em>Tell me about teaching in structured environments like that at [the research site].</em></td>
<td>Prefaced question with a reminder about structure of delivery at research site, and rephrased the question to be: <em>In terms of a structured environment like this, what impact do you think it’s had on your teaching style?</em></td>
</tr>
<tr>
<td>Session 1 / Question 6</td>
<td>Question appeared to limit the response: <em>What are the main differences in teaching in a structured environment like [research site] and other institutions you’ve taught?</em></td>
<td>Reframed the question: <em>When you compare the different institutions where you teach, what are the main differences in the teaching environments?</em></td>
</tr>
<tr>
<td>Session 2 / Question 2</td>
<td>Instructor did not define start of class as first day of class: <em>Take me through the steps you take to let students know you are the instructor when classes start.</em></td>
<td>Removed the time reference in the question: <em>Take me through the steps you take to let students know you are the instructor of the course.</em></td>
</tr>
<tr>
<td>Session 3 / Questions 3 &amp; 4</td>
<td>Natural dialogue about level of presence led to effectiveness of practices before intentions were discussed.</td>
<td>Changed order of questions, allowing instructor to identify most effective practice first, then leading to question about intentions behind that action.</td>
</tr>
</tbody>
</table>
Subject Case Results: Davina

Participant Profile

Davina received her undergraduate degree in teaching, but pursued a professional career outside of teaching when she “realized that I didn't like teaching grades K through 12, and ended up going to work with my dad.” During her 30-year career with the federal government, she had opportunities to train people and mentored young federal workers as they progressed in their careers. After earning a professional graduate degree from the federal government, she pursued a master’s degree at a traditional classroom based university. The week of graduation she was offered a teaching position with the graduate school, where she taught face-to-face courses for a ten-year period. After the events of 9/11, she retired from the federal government to pursue her PhD from an online institution. This program contained “no face to face experience, and that's what encouraged me to become proactive in terms of becoming an online professor… I wanted to make a difference in terms of the relationship between online student and online professor.” Her first online teaching opportunity came at the research site, and during the five year engagement there, she expanded her teaching to include a position at a second online institution. In preparing to be an online instructor, she revealed that:

“I've had no formalized training on how to be an online instructor, in the second university that I work for they had an eight week training course, but that training course was just focused in on how to navigate the system and not really what it meant to be a teacher.”

Receiving nothing other than technology focused training from either institution, she used her face-to-face teaching experience in developing her teaching strategies, but reflected that with respect to her presence, her own experiences as an online student contributed greatly to her approach:
“I learned to be an online teacher by looking at the examples of the professors I had when I was online, and I always felt that I wanted to be highly visible. A lot of the online professors were not highly visible in the course room, and I didn't feel that connection, so I felt that if I became an online professor I would make sure that I would be attentive … be there for them visibly in the course room, so that they know that there's active engagement by the professor … that I was there for them … as an online student I sometimes felt that I was out there by myself.”

Davina was well regarded by her students as indicated by the results of her student evaluations when compared to the average performance of her peers, as displayed in Table 12. In the view of her students she excelled in Overall Effectiveness (3.93) and Course Interaction (3.90), exceeding the average of her peers by 11.97% and 13.37%, respectively, for those criteria of evaluation. Her Average Performance Score (3.89) exceeded her peers average by 10.20%. Overall she exceeded the average scores of her peers by 10.48% based on the original criteria for selection, and 10.29% on the revised criteria for selection.

Table 12

_Davina: Aggregate Performance of Participant_

<table>
<thead>
<tr>
<th></th>
<th>Original Selection Criteria</th>
<th>Revised Selection Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contribution to Learning</td>
<td>Teaching Practices</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>3.43</td>
<td>3.44</td>
</tr>
<tr>
<td>Davina</td>
<td>3.69</td>
<td>3.90</td>
</tr>
<tr>
<td>Difference</td>
<td>+.26</td>
<td>+.46</td>
</tr>
<tr>
<td>% Difference</td>
<td>7.58%</td>
<td>13.37%</td>
</tr>
<tr>
<td>Average %</td>
<td>Original Criteria</td>
<td>Revised Criteria</td>
</tr>
</tbody>
</table>
Interpretation of Narrative

When asked to describe what teaching presence meant to her, Davina identified it in terms of availability to support and guide students and responsiveness to student needs and expectations, as a means to provide that connection between student and teacher:

“To me being present means being in the course room every day, seven days a week, at least once a day, because students are in there at least once a day, and so for me presence is being in the course room once a day, being able to respond to emails and questions relative to the course within a 24 hour period, responding to getting papers back within a day, if not that same day.”

This interpretation of teaching presence was demonstrated by comments made by Davina throughout the series of interviews, whereby she clearly communicated that it was important to her to be highly visible and accessible to her students, so that she could be an immediate resource when and if they needed her. For example she commented:

“I have that high level of visibility from the beginning to the end because I just kind of feel that they need me even if they don’t need me. I always joke with them about this at our first syncsession, I let them know, look I'm in the course room every single day, you may not need me but I am there … because I want to make sure that you're taken care of and all your needs are met so that you can achieve your goals.”

This determination of being highly accessible to students was driven from her own experiences and engenders an authentic relationship between Davina and her students. Because of her own experiences as an online student, she expressed that she wanted to ensure they knew she understood their situation, and the struggle they had with respect to balancing professional life, family life and school and could relate to their need for responsiveness when they had questions.

“I like to be in a position to really work with students and understand where they're coming from as online students because they have work and families and everything else in between that they have to learn to balance as well, so working from that perspective and understanding, and I think that’s what helps me, because I was an online student and I can relate to what they're going through.”
To accomplish this connection with students she starts with preparing herself prior to the course start by doing a complete review of the course content and activities in the classroom, from which she develops her instructional strategies:

“I literally go through, each one of the module discussions to become familiar with the questions, and review the PowerPoint presentations that we have available for each one of the modules. I do revisit the textbook and I do a little bit of research on my own to get some update information just for my background relative to the topic that I'm teaching.”

When students first have access to the course she initiates relationship building, reaching out to students rather than waiting for them to show up, creating a human connection rather than an academic one.

“Even though they have a bio of me I give them more of a personal touch in the Welcome to the Class, so I'll tell them a little about myself in terms of about what some of my hobbies are, what I've been doing with myself literally over the past few months, but just a fun background so that they know that I'm personable … and somebody that they can feel comfortable in reaching out to should they need to.”

As she progresses through the first week of the course, she establishes her availability to students in a variety of ways, using technology that is available in the course room as well as traditional methods of access. Her preparation done prior to students entering the course enables her to proactively engage them in the course content.

“I let them know that the chat room is available, that they can call me, I give them my home number, they can call if they have an emergency and they really need to speak to me, I also use the chat room as another opportunity for them to get to me, and you know the Open Forum ... they take advantage of the chat room when necessary, and they email me. Because I'm literally in the course room every single day, if they send me an email they know that I will respond to them within a 24 hour period.”

“The key for me is just having an active presence, being well organized and understanding the subject matter so that I'm in a better position to actively engage the students in dialogue and interaction and discussion.”
She maintains the level of presence in the course throughout the semester, to ensure students are aware of her availability to support them when they need her and that their success is an important goal for her.

“So that students aren't discouraged or disappointed, based on my experience as an online learner, sometimes students feel that they are floating out there by themselves, they're all alone … they feel like they don't have the attention of the professor, so in order for me to ensure that they have what they need … it’s important for the student … to know that that professor is there for them and really cares about supporting their efforts to achieve their goals.”

These actions show a keen awareness of student engagement and needs, and can be seen as resulting from her personal experiences as an online student, as demonstrated by this comment:

“One of the things that I've learned from my experience as an online student is that sometimes you didn't see your instructor for three, four, five days and you had a question, it was too late by the time they got back to you with a response.”

While Davina creates a student-centric environment, students soon understand that she has an expectation of engagement in the academic activities, that she will facilitate learning not be a lecturer. Through her presence she encourages participation and causes her to be cognizant of students who are not engaged.

“I don't believe in lecturing to students, I think it’s important for them to be able to apply theory to their experiences so as a result my PowerPoints, provide a series of questions that we can actively engage in discussion.”

“It definitely helps to build the momentum to know that I'm actively in there because they see me there on Friday, and then I'm in there again on Saturday, then I'm in there again on Sunday … I'm literally in the course room at least once a day, seven days a week, for at least one to two hours to see what’s going on and to be actively engaged, to respond when necessary, and to poke around to see who's doing what so that I can prompt those who have not been in the course room.”

Davina’s actions are driven by her concern for creating a learning environment that ensures engagement and promotes collaboration, wherein she serves as a resource to
her students to provide guidance that ensures they achieve their goals. This level of presence has implications for the academic tone of her courses, which she acknowledges that, while supportive, requires students to take responsibility in ensuring their success:

“Let’s face it, the subject can be boring if you don't bring any positive energy to it, so being creative in terms of how you set the tone in your classroom … let the class know what you expect of them, in the very beginning be present in the module discussions so you get a clear understanding of what types of students you have, so you can help to guide them as they move forward …”

“ … providing immediate feedback is really important to me, sharing with the students where they are and what they're doing, helps them to grow, and I always give them an opportunity to revise, edit to improve their grades so that they can get stronger … giving them opportunities to improve themselves along the way, if they are willing to work with me, and that seems to help them, so they don't feel stressed about the grade … the A doesn't come easy, they have to work for it, and so if they want to put in the extra effort, if they want to revise their paper, I always encourage them …”

Davina feels that showing this level of active interest in a course and a student’s success in that course, inspires them to be more engaged in the learning process, and results in a level of intellectual curiosity that is supported among peers in the class.

“They have a focus … so they have a different mindset, and that mindset is very serious, so they really have an intellectual mindset that stimulates great critical thinking and analysis, and they provide wonderful resources that they share with the rest … the students will share resources, articles that they've read, journal articles, URLs … and they really stimulate the module discussions and its wonderful … the level of intellectual thinking is just fantastic, so going into the module discussions, I don't have to lead the discussions, they're leading the discussions themselves, and I just join in on their discussions … they just really encourage one another and really stimulate each another and really provide support and guidance and really think about the topic that we're discussing for that module”

As result of the collaborative environment, she feels the relationship between instructor and student is reciprocal, learning from her students as much as they learn from her. Ultimately though, Davina sees the reward of being an online instructor in helping her students achieve their goals.
“…it’s amazing the kind of information and resources that I continue to add to my knowledge because of the type of students, the caliber of the student … it makes my job a lot easier, I don't have to pull it out of them or coax them into answering the question, they see the question, they understand the question, they've done the reading, they know their own experiences, and they do research and they look at other journal articles and … they've done their homework and they know what's expected of them, and they just get into the modules discussions and start to have those kinds of stimulating discussions.”

“I feel that as an online instructor not only are you teaching, but you are facilitating, you are literally being a facilitator for a course, you're facilitating everyone within the course room and guiding them in a way that helps them to understand the goals and objectives of the course and what it is they need to achieve in order to be successful and be able to move forward on their academic journey.”

**Emergent Themes - Category Identification**

Using temporal references within the transcripts to associate specific actions to the phases of course delivery, the analysis revealed the following sequence of activities undertaken by Davina during the term. The actions in Table 13 are displayed in order of frequency mentioned, indicating the level of importance to Davina.

**Table 13**

**Davina: Actions Establishing Teaching Presence (Temporal Context)**

<table>
<thead>
<tr>
<th>Course Preparation</th>
<th>Preview Period</th>
<th>First Week</th>
<th>Remaining Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Review</td>
<td>Form Authentic Relationships</td>
<td>Available for Support / Assistance</td>
<td>Available for Support/ Assistance</td>
</tr>
<tr>
<td>Develop Instructional Plan</td>
<td>Initiate Interactions</td>
<td>Initiate Interaction</td>
<td>Respond to Inquiries</td>
</tr>
<tr>
<td>Topic Familiarization</td>
<td>Note Attendance and Participation</td>
<td>Note Attendance and Participation</td>
<td>Post Announcements</td>
</tr>
<tr>
<td>Supplement Course Materials</td>
<td>Post Announcements</td>
<td>Reduce Obstacles to Access</td>
<td>Provide Formative Feedback</td>
</tr>
<tr>
<td>Check Course Schedules</td>
<td>Build Rapport</td>
<td>Respond to Inquiries</td>
<td>Facilitate Discourse</td>
</tr>
<tr>
<td>Check Technology</td>
<td>Send / Post Welcome Letter</td>
<td>Follow up with Non-participants</td>
<td>Set / Reinforce Expectations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Set / Reinforce Expectations</td>
<td></td>
</tr>
</tbody>
</table>
The primary actions associated with each of the phases are described as follows:

- **Course Preparation: Content Review** – A thorough review of the course content, checking it for accuracy, currency and relevancy, ensuring that the learning environment is ready for students; ensuring familiarization with content and sequence of materials.

- **Preview Period: Form Authentic Relationships** – The development of authentic relationships with students, connecting on areas of personal interests related to the course or professional goals, creating a foundation of trust in the instructor and a basis for open communication.

- **First Week of Class: Initiate Interactions** – The proactive engagement of students through communications of various forms (e.g., email, postings) which inspire student response and involvement in the course activities.

- **First Week of Class/ Remaining Weeks: Available for Support / Assistance** – Send a consistent message that the role of the instructor is to support the academic goals of the students and that the instructor is accessible and available to do so.

A visual representation was constructed to provide the reader a contextualized understanding of the activities being described by the instructor. Using numeration techniques, actions with respect to establishing teaching presence were refined and the most frequently mentioned actions in each phase of the course delivery were identified thematically to simplify the understanding of the case. This visual representation of the themes generated from the temporal analysis of the actions identified by Davina is depicted in Figure 1, with the primary action for each phase depicted in shaded boxes.
To gain greater insight into Davina’s actions overall related to establishing her teaching presence, groupings of common themes generated from the analysis of the transcripts were made using the process of subsumption. Themes associated with these practices were not linked to the temporal aspects of the course, but rather associated with the overall description of the activities carried out by the instructor. To gain an understanding of the relationships between and among the themes and identify primary actions associated with establishing presence, a cluster analysis for word similarity within the themes was performed using the Nvivo software. Using numeration techniques, the themes were then ranked based on the frequency they appeared in the interviews, indicating the level of importance to Davina, and are displayed in Table 14. The Pearson correlation coefficient reflecting the relationship of the theme to teaching presence is also displayed in Table 14.
Davina: Practices Associated with Establishing Teaching Presence

<table>
<thead>
<tr>
<th>Practices Associated with Establishing Teaching Presence</th>
<th>Weighting Based on % References</th>
<th>Pearson’s Coefficient (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce Obstacles to Access</td>
<td>19.10</td>
<td>0.946</td>
</tr>
<tr>
<td>Humanize Course</td>
<td>13.48</td>
<td>0.551</td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>10.11</td>
<td>0.861</td>
</tr>
<tr>
<td>Note Attendance and Participation</td>
<td>10.11</td>
<td>0.853</td>
</tr>
<tr>
<td>Provide Guidance</td>
<td>8.99</td>
<td>0.745</td>
</tr>
<tr>
<td>Develop Instructional Plan</td>
<td>6.74</td>
<td>0.515</td>
</tr>
<tr>
<td>Form Authentic Relationships</td>
<td>5.62</td>
<td>0.595</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>4.49</td>
<td>0.576</td>
</tr>
<tr>
<td>Provide Substantive and Constructive Feedback</td>
<td>4.49</td>
<td>0.636</td>
</tr>
<tr>
<td>Build Rapport</td>
<td>3.37</td>
<td>0.452</td>
</tr>
<tr>
<td>Communicate Clearly and Frequently</td>
<td>3.37</td>
<td>0.516</td>
</tr>
<tr>
<td>Set or Reinforce Expectations</td>
<td>3.37</td>
<td>0.711</td>
</tr>
<tr>
<td>Include Students in Teaching Opportunities</td>
<td>2.25</td>
<td>0.301</td>
</tr>
<tr>
<td>Send and Post Welcome Letter</td>
<td>2.25</td>
<td>0.412</td>
</tr>
<tr>
<td>Acknowledge Student Contributions</td>
<td>1.12</td>
<td>0.138</td>
</tr>
<tr>
<td>Follow Up with Non-Participants</td>
<td>1.12</td>
<td>0.598</td>
</tr>
</tbody>
</table>

The Pearson correlation coefficient generated from the analysis was also used as an indicator of influence to determine the relationships among the themes. A visual representation of these relationships is displayed in Figure 2. Themes most highly correlated with establishing teaching presence were identified as primary themes and are depicted in shaded boxes.
Further analysis of the interview transcripts revealed that Davina’s need to be present and her actions taken in establishing that presence could be aligned to four underlying intentions: (a) to ensure engagement and interaction that supported learning, (b) to serve as a resource to share experiences and knowledge that guided learning, (c) to promote an inclusive and collaborative shared responsibility for the learning environment, and (d) to provide guidance and feedback that developed knowledge and critical thinking skills. To understand how her actions supported and fulfilled these intentions, a cluster analysis based on word similarity within the themes was performed to identify relationships between the actions taken in establishing presence and the identified intentions. Figure 3 provides a visual representation of the results. Only those actions showing a coefficient value of .70 or greater are depicted in the representation, to
provide greater clarity in understanding the primary actions associated with fulfilling Davina’s intentions.

*Figure 3.* Davina: Intentions related to practices establishing teaching presence.

Using the Pearson correlation coefficient generated from the analysis as a measure of the relationship between the actions and the intentions, it was determined that overall Davina’s actions in establishing presence most greatly supported her intention of ensuring engagement and interaction that supported learning ($r = .932$). What also emerged from this analysis was the identification of two key actions most greatly related to fulfilling all intentions: reducing obstacles to access and being readily available to provide support and assistance. These key actions are described as:
• Reduce Obstacles to Access – The instructor proactively establishes multiples paths of communication and maintains high levels of availability to ensure students do not encounter issues accessing them when support or guidance is requested. Instructors will establish and ensure specific response times to inquiries and maintain office hours that enable students accessibility to them as a resource.

• Available for Support / Assistance – Send a consistent message that the role of the instructor is to support the academic goals of the students and that the instructor is accessible and available to do so.

The primary focus of Davina’s actions and intentions relate to ensuring that active participation in the learning process occurs. As such, the implications for setting the academic tone of her courses and its influence on intellectual curiosity of her students was explored. Table 15 provides a list of the primary actions identified by Davina with respect to setting the academic climate in her classroom and those she felt helped inspire intellectual curiosity among her students. These actions are listed in the order of frequency mentioned by Davina, indicating the order of importance to her.

Table 15

_Davina: Practices Associated with Setting Intellectual Climate_

<table>
<thead>
<tr>
<th>Setting Academic Climate</th>
<th>Inspiring Intellectual Curiosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiate Interactions</td>
<td>Showing Active Interest / Passion for Course</td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>Acknowledge Student Contributions</td>
</tr>
<tr>
<td>Promote Shared Responsibility for Learning</td>
<td>Promote Shared Responsibility for Learning</td>
</tr>
<tr>
<td>Setting / Reinforce Expectations</td>
<td>Listening and Asking Questions</td>
</tr>
<tr>
<td>Ensuring Course Integrity</td>
<td>Identifying Relevance</td>
</tr>
<tr>
<td>Providing Substantive and Constructive Feedback</td>
<td>Providing Substantive and Constructive Feedback</td>
</tr>
</tbody>
</table>
Figure 4 provides a visual representation of these themes and the relationships that emerged during the exploration of the implications related to setting academic climate and inspiring intellectual climate.

Figure 4. Davina: Practices related to setting intellectual climate.

Of the actions taken by Davina, initiating interactions emerged as the primary action she referenced as associated with establishing an academic climate in the course room. Davina felt that her demonstration of an active interest in her course emerged as the primary action influencing the intellectual curiosity of her students. Of the other actions described by Davina, two actions were common to both academic functions: (a) promoting shared responsibility for learning, and (b) providing substantive and constructive feedback. This collaborative atmosphere when combined with Davina’s substantive and constructive feedback were identified as important factors in inspiring the intellectual curiosity of her students, creating interest in students within the context of the
classroom, and establishing scholarly activity within the student participants. These four actions are defined as follows:

- **Initiate Interactions** – The proactive engagement of students through communications of various forms (e.g., email, postings) which inspire student response and involvement in the course activities.

- **Active Interest/Passion in the Course**: Exhibit an enthusiasm for teaching the course, relaying the message to students that the instructor enjoys the topic and has a genuine interest in sharing knowledge and experiences.

- **Promote Shared Responsibility for Learning** – Provide students an active role and responsibility in the teaching and learning process with an active voice in the topics covered in the course or path of learning, inspiring collaborative contribution, personal accountability, and engagement in learning community; instructor provides guidance where needed.

- **Provide Substantive and Constructive Feedback** – Provide feedback to students that stimulates thinking, challenges them to view their responses through a different perspective, or provide a path that offers deeper insight into a topic area.

**Subject Case Results: Dominik**

*Participant Profile*

After completing his baccalaureate program, Dominik immediately enrolled in a Master’s program at the same university, which offered traditional face-to-face programs. He had his first teaching experience during his graduate program, which required him to
conduct face-to-face undergraduate lecture and laboratory sessions. However, the experience was not traditional in some ways, as the student population at the school had a large number of non-traditional adult learners, primarily from military personnel. After completing his Master’s degree, Dominik pursued a corporate career, where his position involved his involvement in conducting training sessions for employees, primarily related to the use and adoption of computing systems that supported staff engineers. After working several years in the field, Dominik decided to pursue his doctoral degree, and enrolled in an evening program that was offered in the face-to-face modality, but was designed for working adult learners.

He joined the research site during its early stages, before it converted to a wholly online institution, and was not especially motivated to be an online instructor, stating:

“I went into the online, I'll admit this and I admitted it then, and I'll continue to admit it, I went into the online environment kicking and screaming. Ok, I mean that in all sincerity, I like seeing people, I like the interaction in the classroom, I like reading the body language, but I also enjoy the personal touch that a face to face class environment has that you have to work at in an online environment.”

However, he adjusted his teaching style and adapted to the new delivery format. He has not taught at any other online institutions during his engagement at the research site. When asked about how he learned to be an online instructor, he stated his training to do so was “all OJT [on the job training] … experiential based” indicating that he relied on his face-to-face experiences to shape his delivery in the online environment:

“I just taught like I taught in a classroom, I try to identify with the students, I try and interact with the students, although they are remote … I try to bring the students into the discussion and not be an undergraduate lecturer.”

As indicated by the results of his student evaluations, Dominik was well regarded by his students when compared to his peers, as displayed in Table 16. In the view of his
students he excelled in Student–Centered Approach (3.75) and Teaching Practices (3.63), exceeding the average of his peers by 4.17% and 1.97%, respectively, for those criteria of evaluation. His Average Performance Score (3.61) exceeded his peers average by 2.27%. Overall, he exceeded the average scores of his peers by 2.62% based on the original criteria for selection, and 2.32% on the revised criteria for selection.

Table 16

Dominik: Aggregate Performance of Participant

<table>
<thead>
<tr>
<th>Original Selection Criteria</th>
<th>Contribution to Learning</th>
<th>Course Interaction</th>
<th>Teaching Practices</th>
<th>Student Centered Approach</th>
<th>Effectiveness Overall</th>
<th>Average Performance Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>3.43</td>
<td>3.44</td>
<td>3.56</td>
<td>3.60</td>
<td>3.51</td>
<td>3.53</td>
</tr>
<tr>
<td>Dominik</td>
<td>3.52</td>
<td>3.53</td>
<td>3.63</td>
<td>3.75</td>
<td>3.53</td>
<td>3.61</td>
</tr>
<tr>
<td>Difference</td>
<td>+.09</td>
<td>+.09</td>
<td>+.07</td>
<td>+.15</td>
<td>+.02</td>
<td>+.08</td>
</tr>
<tr>
<td>% Difference</td>
<td>2.62%</td>
<td>2.62%</td>
<td>1.97%</td>
<td>4.17%</td>
<td>0.57%</td>
<td>2.27%</td>
</tr>
<tr>
<td>Average %</td>
<td>Original Criteria</td>
<td>2.62%</td>
<td>Revised Criteria</td>
<td>2.32%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interpretation of Narrative

Dominik described teaching presence in terms of availability to support and guide students serving as an approachable resource to them in a course, stating:

“Being present in an academic setting like this to me means presenting myself to the students as not an overbearing authority but as somebody that has information to share with the students, that I have value that I can impart on them, and value that I wish they would receive and potentially use.”.
This interpretation of teaching presence, which recognized his role to facilitate learning and provide service to students, was demonstrated by comments made by Dominik throughout the series of interviews, such as:

“… what I consider to be the most successful measure is when a student comes to class and says, remember two weeks ago when we talked about this, and you made some recommendations about that, and some of the other students said this that and the other thing, well I went to work the next day and I was presented that same problem, and I remembered what we talked about in class the night before, and it worked. That to me is a measure of the success of the class.”

To ensure students are aware of his presence, he starts with preparing himself by developing his instructional plan, reviewing the entirety of the course, supplementing materials to ensure accuracy, currency and relevance to the student, and considering how he can demonstrate concepts through stories or examples. Having experienced less than adequate course sessions during his first teaching experience, Dominik determined to be organized and prepared:

“I learned the most from my face to face time was prepare the material so that you're not wondering and drifting and that helps keep the attention of the class and also helps the students learn better.”

“The faculty member has to show that they are a master of the material that is being covered, and that the students can depend upon the faculty member to help the students become competent or more competent in that area.”

“I would lay all of the material out, print all of the material out, and look at it holistically, to make sure that I have a vision of how all of the information and modules are connected, to make sure that the material is current, if there are changes in the state of the art or best practice, we modify the material slightly, in order to accomplish the objective of continuing to deliver the most relevant and current information about a topic of the course.”

“I would then dig deeper into each module, and develop a thought process in my mind about the intent of the bullets … and figure out what kind of stories to be told around those bullets, what kind of examples might be available that I might have from my experience, or that we should ask the students to talk about.”
When students have access to the course, Dominik introduces himself to students in a variety of ways, building rapport and creating a foundation for authentic relationships. He notices when familiar names appear, where a new course provides an opportunity to build upon previous course connections:

“I would also go into the chat function and write an introductory paragraph or three, welcome my name is [Name], here's a little bit about my background, and I look forward to working with each of you in the course. Just kind of a handshake approach to an outreach to the students.”

“It started to be an opportunity where the class members were bonding. There would also be an occasional student that would say, oh [Name] remember, I took this other class from you a couple years ago, and I look forward to working with you.”

“it’s the student's understanding that someone on the other side of the conversation knows who they are and is listening to them … and it certainly helps to address the students by name, instead of a "What was your name again?” or "who's talking?” so recognizing the voice is very important.”

As the course progresses into the first week, Dominik described how he continued to build relationships with students, initiating interaction with those that may have delayed their participation, drawing them into the course discussions. These actions offered students a way to connect with Dominik in a collegial manner where he reminds them of his role and availability in supporting them, as demonstrated in these comments:

“I would talk a little bit about my employer, some of my work history, I would talk about my educational background, and I would always conclude with, to paraphrase, something to the effect of I know what you are doing because I did my programs in a similar fashion to what you are doing, even though I was in a brick and mortar situation, I was in a part-time situation and I had other obligations, I had family, church, work, and I understand all of the pressures that we have working on us, and I look forward helping you succeed in this course.”

“The first thing I do is reach out to that student and ask them, and say I noticed that you are not doing this, or your assignments are late, or you're not posting enough, is there any way that I can help you, is there something happening that we need to talk about, and encourage a one-on-one dialogue to work on addressing that problem.”
Dominik recognizes the importance of engaging students, challenging them to think more deeply, and providing them the opportunity to participate actively in the delivery of the course.

“The synsessions always start out as the students expecting a lecture, and then not participating, and the biggest challenge I've had is trying to bring the students out … and going into pause mode, and just stop talking and expecting somebody else to say well what about this, what about that, and if I don't get that, then I will start asking questions of the students.”

 “… my approach towards my postings at that point is to be the devil’s advocate, and to say have you thought about this, what about that, have you any experience with this, oh this would be an interesting topic to talk about in our next live session … and that's the way the first week went, and that's generally the way most of the postings went.”

Throughout the remainder of the semester, Dominik’s primary actions relate to being available and accessible to provide support and assistance, encouraging student participation. He felt his role was to keep the students focused while migrating authority in the course to share the responsibility of teaching in a collaborative manner:

“So one of the common posts from me is let's stay on topic here, we're not worried about what the textbook says, we're here to share our own experiences, and what we believe the topic is about, the discussion topic is about … that also helps to find out some commonality … but also to provide a continuum of interest in them, 'well remember last time we talked about this’, ‘last time you started talking about your project’.”

Dominik’s underlying intention of connecting with students in authentic ways serve to establish his presence and provide a foundation in ensuring that the engagement and interaction in his courses support learning, as reflected in these statements:

“Dialogue, by the exchange of experience … ask questions of the student, what is your experience in this beyond the topic of the discussion questions, what is your experience in this, oh I noticed that you took this other class, how do you think that other class prepared you for this class, or what do you think this class is going to prepare you to do? But it’s establishing a rapport with the students, a common bond, or multiple common bonds, so that the students can identify with the faculty member, and not just think about them as somebody standing behind a lectern.”
“I would say by the middle and end of the term I have developed a closer relationship with the students, not on an academic stance perspective, but I know them by name, I can recognize their voice, and so it makes the interaction from faculty to student more natural.”

The primary focus of Dominik’s actions and intentions related to ensuring that active participation in a scholarly learning process occurred. As such, he views his role in setting the academic tone of his courses and inspiring the intellectual curiosity of his students as critical, but tenuous, if a student’s contribution is not respected or considered. He also informs students they have the responsibility to share knowledge so everyone can advance - as made apparent in these comments:

“… to establish a relationship with the students, respect the students, respect the fact that they may know things, about things that you the instructor don't know that can be helpful in the class, and that the instructor can walk away with some insight that they had not considered. But to me the biggest thing is to respect the students. Don't try to be the overbearing authority.”

“One of the things that I tell students at the very beginning is that there may be areas in the course where any particular student is more knowledgeable than anybody else in the course and has relevant experience that can be shared and should be shared to allow everybody to take advantage of that.”

Although his approach was based on building trust through authentic relationships, Dominik communicated an academic tone in his courses that challenged students and reinforced his expectations of performance. He recognized that modeling scholarly behavior that elicits deeper reflection is an important role in establishing an academic climate:

“The academic tone is generally directed at getting students to think out of the box … bringing out critical thinking instead of just marketing talk.”

“… it’s trying to get the students to think originally, using research literature sources for information and not just trade press. … it’s encouraging the students to look at the research slash academic or scholarly literature about what’s going on in the field that may be in the laboratory but not in the office yet.”
“Probably the best way to do that is for the faculty member to share their own experiences. To maybe pose some research questions- If you want to get into the academic situation, what other books outside of the text have you read? Just as a general question. Has anybody read any interesting text other than the course text on this topic? To establish an academic rapport, the faculty member needs to present their academic credentials. Not just their degrees, but something about their experiences and courses they've taken.”

Dominik feels that finding relevance for the student and listening and asking deeper questions, inspires students. Showing them the relevance and applicability of the course or activities to their goals, he feels results in an increased level of intellectual curiosity as they explore more deeply on an individual level.

“I'd like to think that the way that I run the class helps promote the students' interest in the topic that we're discussing, so that they will not just think of it as, oh I'm taking a class, its oh I learned something and I'm looking forward to the next session.”

“I occasionally a couple times a year, will have students come and say we talked about this topic last week and I've either run across that problem at work or I thought that maybe I could do research in that topic so I've started reading more about it.”

“Individual knowledge comes from the students talking about how what they're learning applies to either what they're doing in their job, or what they plan to do in some future academic setting.”

Although Dominik became an online instructor “kicking and screaming”, he reflected that there was value in online delivery not only when it came to building relationships with students, but also in terms of his teaching performance:

“You know the online delivery technology is very different, the ability to grade, the ability to communicate with students at any time, that kind of technology has very much enhanced the student faculty relationship.”

“The most important thing that it provided was structure. It helped me stay on track, it helped me remember course objectives, it helps keep documents organized, all the course material or student material was in one place not scattered in twenty five different emails or folder files sitting on my desk.”
Emergent Themes - Category Identification

Using temporal references within the transcripts to associate specific actions to the phases of course delivery, the analysis revealed the sequence of activities undertaken by Dominik during the term. The actions in Table 17 are displayed in order of frequency mentioned, indicating the level of importance to Dominik.

Table 17

Dominik: Actions Establishing Teaching Presence (Temporal Context)

<table>
<thead>
<tr>
<th>Course Preparation</th>
<th>Preview Period</th>
<th>First Week</th>
<th>Remaining Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Instructional Plan</td>
<td>Form Authentic Relationships</td>
<td>Form Authentic Relationships</td>
<td>Available for Support/ Assistance</td>
</tr>
<tr>
<td>Supplement Course Materials</td>
<td>Build Rapport</td>
<td>Initiate Interactions</td>
<td>Shared Responsibility for Learning</td>
</tr>
<tr>
<td>Content Review</td>
<td>Initiate Interactions</td>
<td>Build Rapport</td>
<td>Follow Up with Non-Participants</td>
</tr>
<tr>
<td>Topic Familiarization</td>
<td>Note Attendance and Participation</td>
<td>Available for Support / Assistance</td>
<td>Set / Reinforce Expectations</td>
</tr>
<tr>
<td>Post Announcements</td>
<td>Available for Support / Assistance</td>
<td>Shared Responsibility for Learning</td>
<td>Facilitate Discourse</td>
</tr>
<tr>
<td>Check Roster</td>
<td>Check Roster</td>
<td>Set / Reinforce Expectations</td>
<td>Provide Feedback</td>
</tr>
<tr>
<td></td>
<td>Send / Post Welcome Letter</td>
<td>Follow Up with Non-Participants</td>
<td>Respond to Inquiries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Communicate Clearly and Frequently</td>
<td></td>
</tr>
</tbody>
</table>

The primary actions associated with each of the phases are described as follows:

- Course Preparation: Develop Instructional Plan – The consideration of course learning objectives, activities that assists in student achievement, identification of resources and discussion questions that motivate students and generate interest in the topics; the creation of a weekly plan which is referred to and executed to ensure learning objectives are attained.
• Preview Period / First Week of Class: Form Authentic Relationships – The development of authentic relationships with students, connecting on areas of personal interests related to the course or professional goals, creating a foundation of trust in the instructor and a basis for open communication.

• Remaining Weeks: Available for Support / Assistance – Send a consistent message that the role of the instructor is to support the academic goals of the students and that the instructor is accessible and available to do so.

A visual representation was constructed to provide the reader a contextualized understanding of the activities being described by the instructor. Using numeration techniques, actions with respect to establishing teaching presence were refined and the most frequently mentioned actions in each phase of the course delivery were identified thematically to simplify the understanding of the case. This visual representation of the themes generated from the temporal analysis of the actions identified by Dominik is depicted in Figure 5, with the primary action for each phase depicted in shaded boxes.
To gain greater insight into Dominik’s actions related to establishing his teaching presence, groupings of common themes generated from the analysis of the transcripts were made using the process of subsumption. Themes associated with these practices were not linked to the timeline of the course, but rather associated with the overall description of the purpose of the activities carried out by the instructor. To gain an understanding of the relationships between and among the themes and identify primary actions associated with establishing presence, a cluster analysis for word similarity within the themes was performed using the Nvivo software. Using numeration techniques, the themes were then ranked based on the frequency they appeared in the interviews, indicating the level of importance to Dominik, and are displayed in Table 18. The Pearson correlation coefficient reflecting the relationship of the theme to teaching presence is also displayed in Table 18.
Table 18

**Dominik: Practices Associated with Establishing Teaching Presence**

<table>
<thead>
<tr>
<th>Practices Associated with Establishing Teaching Presence</th>
<th>Weighting Based on % References</th>
<th>Pearson’s Coefficient (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form Authentic Relationships</td>
<td>21.25</td>
<td>0.845</td>
</tr>
<tr>
<td>Build Rapport</td>
<td>13.75</td>
<td>0.786</td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>8.75</td>
<td>0.155</td>
</tr>
<tr>
<td>Serve as a Resource to Students</td>
<td>8.75</td>
<td>0.592</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>7.50</td>
<td>0.637</td>
</tr>
<tr>
<td>Include Students in Teaching Opportunities</td>
<td>6.25</td>
<td>0.518</td>
</tr>
<tr>
<td>Communicate Clearly and Frequently</td>
<td>6.25</td>
<td>0.370</td>
</tr>
<tr>
<td>Follow Up with Non-Participants</td>
<td>5.00</td>
<td>0.337</td>
</tr>
<tr>
<td>Humanize Course</td>
<td>5.00</td>
<td>0.358</td>
</tr>
<tr>
<td>Developing Instructional Plans</td>
<td>3.75</td>
<td>0.426</td>
</tr>
<tr>
<td>Note Attendance and Participation</td>
<td>3.75</td>
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<tr>
<td>Provide Guidance</td>
<td>3.75</td>
<td>0.288</td>
</tr>
<tr>
<td>Provide Substantive and Constructive Feedback</td>
<td>2.50</td>
<td>0.208</td>
</tr>
<tr>
<td>Set or Reinforce Expectations</td>
<td>2.50</td>
<td>0.387</td>
</tr>
<tr>
<td>Send and Post Welcome Letter</td>
<td>1.25</td>
<td>0.327</td>
</tr>
</tbody>
</table>

The Pearson correlation coefficient generated from the analysis was also used as an indicator of influence to determine the relationships among the themes. A visual representation of these relationships is displayed in Figure 6. Themes most highly correlated with establishing teaching presence were identified as primary themes and are depicted in shaded boxes.
Further analysis of the interview transcripts revealed that Dominik’s actions taken in establishing this presence could be aligned with two underlying intentions: (a) to connect in authentic ways with the students he taught and (b) to ensure engagement and interaction that supported learning. To understand how his actions supported and fulfilled these intentions, a cluster analysis based on word similarity within the themes was performed to identify relationships between the actions taken in establishing presence and the four identified intentions. Figure 7 provides a visual representation of the results. Only those actions showing a coefficient value of .60 or greater are depicted in the representation, to provide greater clarity in understanding the primary actions associated with fulfilling Dominik’s intentions.
Using the Pearson correlation coefficient generated from the analysis as a measure of the relationship between the actions and the intentions, it was determined that overall Dominik’s actions in establishing presence most greatly supported his intention of connecting in authentic ways with the students he taught ($r=.845$). What also emerged from this analysis was the identification of two key actions most greatly related to fulfilling both of these intentions: forming authentic relationships with students and building rapport. These actions are defined as:

- **Form Authentic Relationships** – The development of authentic relationships with students, connecting on areas of personal interests related to the course or professional goals, creating a foundation of trust in the instructor and a basis for open communication.

- **Build Rapport** – Establish and develop a collegial or peer-level relationship with students based on common interests, experiences, or understandings that builds trust and enhances communications.
Given that Dominik’s primary intentions and actions relate to connecting with students authentically as a means of ensuring engagement and interaction that supports learning, the implications for setting the academic tone of his courses and its influence on intellectual curiosity of his students was explored. Table 19 provides a list of the primary actions identified by Dominik with respect to setting the academic climate in his classroom and those he felt helped inspire intellectual curiosity among his students. These actions are listed in the order of frequency mentioned by Dominik, indicating the order of importance to him.

Table 19

*Dominik: Practices Associated with Setting Intellectual Climate*

<table>
<thead>
<tr>
<th>Setting Academic Climate</th>
<th>Inspiring Intellectual Curiosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge Students</td>
<td>Identifying Relevance</td>
</tr>
<tr>
<td>Set / Reinforce Expectations</td>
<td>Listening and Asking Questions</td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>Sharing Responsibility for Learning</td>
</tr>
<tr>
<td>Model Scholarly Behavior</td>
<td>Showing Active Interest / Passion for Course</td>
</tr>
<tr>
<td>Supplement Course Materials</td>
<td>Supplement Course Materials</td>
</tr>
<tr>
<td>Providing Substantive and Constructive Feedback</td>
<td>Providing Substantive and Constructive Feedback</td>
</tr>
<tr>
<td>Provide Individual Counseling</td>
<td>Creatively Present Materials</td>
</tr>
</tbody>
</table>

Figure 8 provides a visual representation of the themes and relationships that emerged during the exploration of the implications related to setting academic climate and inspiring intellectual climate.
Of the actions described by Dominik, challenging students emerged as the primary action associated with establishing the academic climate in the course room. Dominik’s concern with ensuring that topics, materials, and assignments had relevance to the academic interests and goals of students emerged as the primary action influencing the intellectual curiosity in his courses. These actions are defined as follows:

- **Challenge Students** – Generate interest in the topics and uphold the expectations of rigor and performance through the design of course activities, motivating students to extend beyond the textbook, the course room and potentially their own boundaries.

- **Relevance to Student** – Preparation of course content, activities, and assignments acknowledging student perspective and interests, and tailoring course assignments to the needs and interests of the student.

Two actions were common to both academic functions: supplementing course materials and providing substantive and formative feedback. These actions support the
identification of relevant materials for students while maintaining the ability to deliver individual support to a student’s attainment of personal goals, and are defined as follows:

- **Supplement Course Material** – Provide supplemental materials, such as articles, or videos, extending the course beyond the textbook and the course room, personalizing it for the instructor and tailoring it to student interests; incorporation of supplemental materials to support current themes in the discipline or provide examples of relevancy to students.

- **Provide Substantive and Constructive Feedback** – Provide feedback to students that stimulates thinking, challenges them to view their responses through a different perspective, or provide a path that offers deeper insight into a topic area.

**Subject Case Results: Karissa**

*Participant Profile*

Karissa received her PhD, two Master’s degrees and her baccalaureate from traditional universities in face-to-face classroom environments. She started teaching in face-to-face classroom situations, while a graduate student and before she pursued a professional career in writing and editing. She had not intended to teach online, but had been recruited by the research site for her experience in teaching research writing. Her first experience teaching online was at the research site, and during the five year engagement with the university also taught at another online institution.

She received only technical training from the institutions, and did not feel that it hampered her ability to adjust to teaching online, reflecting that:
“Mostly I brought my in person teaching experience with me, so I had that, and I learned because the students have certain expectations and I wanted to meet that. Also, the way the courses were structured, it was easy to facilitate class meetings.”

Karissa was well regarded by her students as indicated by the results of her student evaluations, as compared to the average performance of her peers, as displayed in Table 20. In the view of her students she excelled in Student–Centered Approach (3.89) and Effectiveness Overall (3.86), exceeding the average of her peers by 8.06% and 9.97%, respectively, for those criteria of evaluation. Her Average Performance Score (3.77) exceeded her peers average by 6.79%. Overall, she exceeded the average scores of her peers by 2.91% based on the original criteria for selection, and 6.77% on the revised criteria for selection.

Table 20

Karissa: Aggregate Performance of Participant

<table>
<thead>
<tr>
<th>Original Selection Criteria</th>
<th>Contribution to Learning</th>
<th>Course Interaction</th>
<th>Teaching Practices</th>
<th>Student Centered Approach</th>
<th>Effectiveness Overall</th>
<th>Average Performance Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>3.43</td>
<td>3.44</td>
<td>3.56</td>
<td>3.60</td>
<td>3.51</td>
<td>3.53</td>
</tr>
<tr>
<td>Karissa</td>
<td>3.58</td>
<td>3.49</td>
<td>3.83</td>
<td>3.89</td>
<td>3.86</td>
<td>3.77</td>
</tr>
<tr>
<td>Difference</td>
<td>+.15</td>
<td>+.05</td>
<td>+.27</td>
<td>+.29</td>
<td>+.35</td>
<td>+.24</td>
</tr>
<tr>
<td>% Difference</td>
<td>4.37%</td>
<td>1.45%</td>
<td>7.58%</td>
<td>8.06%</td>
<td>9.97%</td>
<td>6.79%</td>
</tr>
<tr>
<td>Average %</td>
<td>Original Criteria</td>
<td>2.91%</td>
<td>Revised Criteria</td>
<td>6.77%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Revised Selection Criteria
When asked to describe what teaching presence meant to her, Karissa identified it in terms of responsiveness to student needs and availability to support and guide students:

“Being present... means that the student is not teaching themselves. Being present means that they don't face an empty course shell with readings and things that they do on their own ... being present would be making sure that doesn't happen to the students, so you have to establish the fact that it’s your class and that you're available for students at all times ... to show the student that they have a facilitator or a guide.”

This interpretation of teaching presence was demonstrated by comments made by Karissa throughout the series of interviews, whereby she clearly communicated her student-centered nature. For example she commented:

“I've heard other people complain that online courses are just like I'm reading the book and teaching myself ... I choose to be particularly present in the beginning of the class so that students don't get stuck on anything, and I maintain that presence all through the course, always making myself available in the chat hours ... I think it’s my responsibility as a teacher to do that because you don't want a student floundering around in there by themselves.”

To ensure students are aware of her presence, she starts with preparing herself prior to the course start by creating a welcoming environment, and planning her instructional strategies. She subtly models her expectations of engagement by posting the first response to the discussion questions, and ensures she is comfortable with the technology and that the course is ready for students.

“One of the first things I do is write a welcome message and introduce myself to the class, and make sure that they know that I'm thrilled that they'll be participating. Then I take a look at all the modules, just to see if anything is changed, or if I need to change anything. Then I'll do the reading for the first module and maybe make a post to the discussion threads for the questions so that there's a response for them to respond to. I also practice, I used to practice the white board to make sure all the technology works for me, and then I was ready to go.”
When students have access to the course she then starts connecting with students, forming relationships and welcoming students as they arrive. She is cognitive of the importance of her being available to them, and maintains accessibility through a variety of methods:

“I think that first initial message is so important to set the tone for the class. Then I think it’s important for the instructor to respond to each person's introduction by themselves, and make sure that they know that you're there.”

“In the preview period, the introductory post where I told them how thrilled I was to be working with them, let them know about the chat session, I told them that I was available by email and by phone, and then I would read their introductory posts and respond to them, and I would monitor the course shell to see if anyone would have any questions about the upcoming assignments or the books, or the modules themselves, how to log in or anything like that. I made sure I was there.”

As she progressed through the first week of the course, she reconfirmed her availability to students in a variety of ways, reminding them that she was a resource ready to assist them. These actions show a keen awareness of student needs as well as a determination to reassure students that they had the ability to succeed, and that she had a shared interest in their success, as demonstrated in these comments:

“I would just let them know that I had all this experience so that they know they were in good hands and at the same time I let them know that I was there to help them, not to harm them, which I think was really important, I was there to support them and I think that was key.”

“By making sure that I check in with the discussion threads, and always reminding people that I was there for chat hours, making sure that they had my phone numbers so that they could call me, and making it very clear to them that I would rather have them call me than struggle with anything, because there was no need for them to be stuck on anything, that they could always call me. And, people did call me.”

Throughout the remainder of the semester, Karissa’s actions centered on actively engaging the students in the teaching activities, to create interaction and support their
success. She felt her presence reminded students of their obligation to be responsible to be active, and that they had a voice in the course:

“I think that if an instructor is present, they're [the students] more likely to be active. They're more likely to be more active.”

“I would engage them by having each student take a slide to read and review with the class and that way every single person was engaged and had to speak. Then we would talk about things from their discussion threads and I'd ask them about their synsessment assignments and how that went, and then we'd take a look to see what was coming up next.”

Karissa’s primary actions were driven by her desire to connect and engage students in a supportive learning environment that promoted collaboration, while serving as a resource, providing guidance primarily through feedback. This determination to provide a non-judgmental and inclusive environment and share her expertise with her students was reflected in the amount of time and substantive feedback she provided them, which students recognized.

“Well first we would just talk about the anxiety and a lot of them had not written for a long time, so we just talked about that, about how they hadn't written a paper since high school or whatever, or they weren't sure about their grammar or whatever, and we'd have a conversation about it. I'd ask them to just to do the best they could, and then I would provide extensive feedback so they didn't have to worry about feeling inadequate or anything, I never used those words. So they never had to really stress about their ability to complete assignments.”

“I would spend a great amount of time with extensive commentary on their papers and I felt that way they were getting the benefit of my experience and I was helping them shape their work so that it was more effective. So that was a huge, huge part of making my presence known in the class … and I often got comments from students how much time I spent and how grateful they were for that.”

Although her approach was supportive and non-threatening, she communicated an academic tone in her courses that required students to understand the importance of the skills they were learning and the level of work that was expected of them. She set an
expectation that they had a responsibility in contributing to each other’s success, to be actively engaged in the course, and to recognize the purpose of the course activities.

“In the discussions we had I made it clear that they were part of an academic community, a community of scholars with a certain language that they had to speak, certain conventions that they had to adhere to as part of that scholarly community, and that they were there to add to part of that discussion, not just to repeat it.”

“All the way through … I would have them look at each other’s work, at the end of the presentations, which were always fabulous. First of all I would encourage them to choose topics that they were passionate about, because I made sure that they knew that it was a tough road ahead and in order for them to get through they had to choose something that they really loved, and then we talked about the community of scholarship, and then at the last session when they did their presentations, I would always ask after each presentation I would ask the class did this add to the body of knowledge and how.”

“… because I want them to know what is at stake, that this is not just an empty exercise and again to try to prepare them for this community that they’re part of now.”

Karissa feels that showing an active interest and enthusiasm for her course and for the student’s contributions in that course, inspires them to be more engaged in the learning process, and results in a level of intellectual curiosity that is supported among peers in the class. She used non-traditional approaches to course activities, for example, employing interactive games, such as Grammar Jeopardy, to teach basic punctuation rules. She also recognized that students could energize each other, inspiring competition in some ways, which resulted in increased learning opportunities and sharing of information:

“Inspiring intellectual curiosity the teacher has to be enthusiastic. I think you have to come to it with a real love for scholarship, a real love for research, a real love to see what people have to say. Because I know I would always get excited about the topics the people chose and these are subject matter experts so it was key to treat them as such, and I think I learned probably more from them than they did from me.”
“I always like when there was a student who was excellent because that made the other students want to do better as well. So there was some really, really effective discussion threads, discussion posts between students when there was a stellar student.”

“There was information that was presented in such a way that it engaged students, for example there was one section that talked about how to use punctuation and it was presented in a clever fashion – in a game – I think it engaged all of them, because what would happen in those situations, especially in the punctuation part, people would start using the chat feature in the course to give examples of what those particular grammatical things would look like…”

Although Karissa never intended to become an online teacher, she reflected that it was rewarding when it came to building relationships with students. She did not see the lack of physical presence as a negative, but reflected on it as a different dimension to teaching which was more robust in some ways. She showed a deep investment in her students’ success, not just during the course period, but concern for their long-term success as professionals.

“In person is always good because you have the immediate energy exchange with student and that is fantastic. Online is the same way, but you have both immediate and asynchronous and synchronous contact with students, which adds another dimension to teaching because you get to spend time with the students when they’re not even there…”

“It really did become a labor of love because I wanted people to be successful, and they wanted to be successful, so and I wanted them to be successful down the line too, so it was because I cared about them.”

Emergent Themes - Category Identification

Using temporal references within the transcripts to associate specific actions to the phases of course delivery, the analysis revealed the following sequence of activities undertaken by Karissa during the term. The actions in Table 21 below are displayed in order of frequency mentioned, indicating the level of importance to Karissa.
Karissa: Actions Establishing Teaching Presence (Temporal Context)

<table>
<thead>
<tr>
<th>Course Preparation</th>
<th>Preview Period</th>
<th>First Week</th>
<th>Remaining Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Instructional Plan</td>
<td>Form Authentic Relationships</td>
<td>Available for Support/</td>
<td>Available for Support/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistance</td>
<td>Assistance</td>
</tr>
<tr>
<td>Content Review</td>
<td>Available for Support/</td>
<td>Build Rapport</td>
<td>Provide Formative Feedback</td>
</tr>
<tr>
<td></td>
<td>Assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic Familiarization</td>
<td>Respond to Inquiries</td>
<td>Initiate Interactions</td>
<td>Set / Reinforce Expectations</td>
</tr>
<tr>
<td>Prepare Welcome Letter</td>
<td>Send / Post Welcome Letter</td>
<td>Set / Reinforce Expectations</td>
<td>Facilitate Discourse</td>
</tr>
<tr>
<td>Check Technology</td>
<td>Post Announcements</td>
<td>Shared Responsibility for Learning</td>
<td>Post Announcements</td>
</tr>
<tr>
<td></td>
<td>Note Attendance and Participation</td>
<td>Note Attendance and Participation</td>
<td>Respond to Inquiries</td>
</tr>
<tr>
<td></td>
<td>Reduce Obstacles to Access</td>
<td></td>
<td>Shared Responsibility for Learning</td>
</tr>
</tbody>
</table>

The primary actions associated with each of the phases are described as follows:

- **Course Preparation: Develop Instructional Plan** – The consideration of course learning objectives, activities that assist in student achievement, identification of resources and discussion questions that motivate students and generate interest in the topics; the creation of a weekly plan which is referred to and executed to ensure learning objectives are attained.

- **Preview Period: Form Authentic Relationships** – The development of authentic relationships with students, connecting on areas of personal interests related to the course or professional goals, creating a foundation of trust in the instructor and a basis for open communication.

- **Preview Period / First Week of Class / Remaining Weeks: Available for Support / Assistance** – Send a consistent message that the role of the instructor
is to support the academic goals of the students and that the instructor is accessible and available to do so.

- Remaining Weeks: Provide Substantive and Constructive Feedback – Provide feedback to students that stimulates thinking, challenges them to view their responses through a different perspective, or provide a path that offers deeper insight into a topic area.

A visual representation was constructed to provide the reader a contextualized understanding of the activities being described by the instructor. Using numeration techniques, actions with respect to establishing teaching presence were refined and the most frequently mentioned actions in each phase of the course delivery were identified thematically to simplify the understanding of the case. This visual representation of the themes generated from the temporal analysis of the actions identified by Karissa is depicted in Figure 9, with the primary action for each phase depicted in shaded boxes.
To gain greater insight into Karissa’s actions related to establishing her teaching presence, groupings of common themes generated from the analysis of the transcripts were made using the process of subsumption. Themes associated with these practices were not linked to the timeline of the course, but rather associated with the overall description of the purpose of the activities carried out by the instructor. To gain an understanding of the relationships between and among the themes and identify primary actions associated with establishing presence, a cluster analysis for word similarity within the themes was performed using the Nvivo software. Using numeration techniques, the themes were ranked based on the frequency they appeared in the interviews, indicating the level of importance to Karissa, and are displayed in Table 22. The Pearson correlation coefficient reflecting the relationship of the theme to teaching presence is also displayed in Table 22.
### Karissa: Practices Associated with Establishing Teaching Presence

<table>
<thead>
<tr>
<th>Practices Associated with Establishing Teaching Presence</th>
<th>Weighting Based on % References</th>
<th>Pearson’s Coefficient (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide Guidance</td>
<td>16.83</td>
<td>0.864</td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>13.86</td>
<td>0.893</td>
</tr>
<tr>
<td>Build Rapport</td>
<td>9.90</td>
<td>0.669</td>
</tr>
<tr>
<td>Set or Reinforce Expectations</td>
<td>9.90</td>
<td>0.787</td>
</tr>
<tr>
<td>Communicate Clearly and Frequently</td>
<td>8.91</td>
<td>0.749</td>
</tr>
<tr>
<td>Form Authentic Relationships</td>
<td>5.94</td>
<td>0.613</td>
</tr>
<tr>
<td>Provide Substantive and Constructive Feedback</td>
<td>5.94</td>
<td>0.348</td>
</tr>
<tr>
<td>Develop Instructional Plan</td>
<td>4.95</td>
<td>0.571</td>
</tr>
<tr>
<td>Include Students in Teaching Opportunities</td>
<td>4.95</td>
<td>0.727</td>
</tr>
<tr>
<td>Send and Post Welcome Letter</td>
<td>4.95</td>
<td>0.517</td>
</tr>
<tr>
<td>Acknowledge Student Contributions</td>
<td>3.96</td>
<td>0.509</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>3.96</td>
<td>0.431</td>
</tr>
<tr>
<td>Follow Up with Non-Participants</td>
<td>2.97</td>
<td>0.060</td>
</tr>
<tr>
<td>Note Attendance and Participation</td>
<td>2.97</td>
<td>0.620</td>
</tr>
</tbody>
</table>

The Pearson correlation coefficient generated from the analysis was also used as an indicator of influence to determine the relationships among the themes. A visual representation of these relationships is displayed in Figure 10. Themes most highly correlated with establishing teaching presence were identified as primary themes and are depicted in shaded boxes.
Figure 10. Karissa: Themes related to practices establishing teaching presence.

Further analysis of the interview transcripts revealed that Karissa’s actions taken in establishing this presence could be aligned to four underlying intentions: (a) to ensure engagement and interaction that supported learning, (b) to serve as a resource to share experiences and knowledge that guided learning, (d) to promote an inclusive and collaborative shared responsibility for the learning environment, and (d) to connect with students in authentic ways. To understand which of her actions supported and fulfilled these intentions, a cluster analysis based on word similarity within the themes was performed to identify relationships between the actions taken in establishing presence and the identified intentions. Figure 11 provides a visual representation of the results. Only those actions showing a coefficient value of .70 or greater are depicted in the representation, to provide greater clarity in understanding the primary actions associated with fulfilling Karissa’s intentions.
Using the Pearson correlation coefficient generated from the analysis as a measure of the relationship between the actions and the intentions, it was determined that overall Karissa’s actions related to establishing presence most greatly supported her intention of ensuring engagement and interaction that supported learning ($r = .922$). What also emerged from this analysis was the identification of two key actions involved in fulfilling three of the four underlying intentions: being readily available to provide support and assistance, and setting and reinforcing expectations of performance. These are defined as:

- Available for Support / Assistance – Send a consistent message that the role of the instructor is to support the academic goals of the students and that the instructor is accessible and available to do so.
• Set / Reinforce Expectations: Setting clear expectations of rigor and performance commensurate with course level and degree program in student friendly language, providing these in written and verbal form, and reinforcing them in practice through clear instructions, examples, and formative feedback.

The primary focus of Karissa’s actions and intentions relate to ensuring that active participation in a scholarly learning process occurs in a collaborative manner. As such, the implications for setting the academic tone of her courses and its influence on intellectual curiosity of her students was explored. Table 23 provides a list of the primary actions identified by Karissa with respect to setting the academic climate in her classroom and those she felt helped inspire intellectual curiosity among her students. These actions are listed in the order of frequency mentioned by Karissa, indicating the order of importance to her.

Table 23

_Karissa: Practices Associated with Setting Intellectual Climate_

<table>
<thead>
<tr>
<th>Setting Academic Climate</th>
<th>Inspiring Intellectual Curiosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set / Reinforce Expectations</td>
<td>Acknowledge Student Contributions</td>
</tr>
<tr>
<td>Model Scholarly Behavior</td>
<td>Promote Shared Responsibility for Learning</td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>Supplement Course Materials</td>
</tr>
<tr>
<td>Promote Shared Responsibility for Learning</td>
<td>Identifying Relevance</td>
</tr>
<tr>
<td>Inspire Personal Responsibility for Learning</td>
<td>Showing Active Interest / Passion for Course</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>Creative Presentation of Materials</td>
</tr>
<tr>
<td>Provide Individual Counseling</td>
<td></td>
</tr>
</tbody>
</table>

Figure 12 provides a visual representation of these themes and the relationships that emerged during the exploration of the implications related to setting academic
climate and inspiring intellectual climate using numeration techniques to identify the importance of the actions.

Figure 12. Karissa: Practices related to setting intellectual climate.

Karissa’s ability to set and reinforce expectations for performance in a non-threatening manner emerged as the primary action she associated with setting the academic tone in her courses. By acknowledging relevant examples based on student contributions within the context of the classroom, she felt intellectual interest in students was stimulated and inspired greater collaboration among students, reinforcing a shared responsibility in contributions to the pool of resources shared among the course members. This collaborative atmosphere promoted by Karissa in sharing responsibility for the learning in the classroom affected both academic functions in her courses. These three practices, from Karissa’s perspective, had the greatest influence on the intellectual climate of the course, and are defined as follows:
• Acknowledge Student Contributions – A proactive incorporation of student contributions (postings, presentations, etc.) in course activities which draws students into the course, capitalizes on collaboration, creates opportunities for student-led teaching, and acknowledges a shared agency in learning.

• Set / Reinforce Expectations: Setting clear expectations of rigor and performance commensurate with course level and degree program in student friendly language, providing these in written and verbal form, and reinforcing them in practice through clear instructions, examples, and formative feedback.

• Promote Shared Responsibility for Learning – Provide students an active role and responsibility in the teaching and learning process with an active voice in the topics covered in the course or path of learning, inspiring collaborative contribution, personal accountability, and engagement in learning community; instructor provides guidance where needed.

Subject Case Results: Leighton

Participant Profile

Coming from an economically depressed region of the southern United States, the desire to obtain education was a means for personal and financial improvement for Leighton. Leighton began his studies at a community college on a fellowship, finishing two associate degrees in a period of one year. Transferring to a traditional university to complete his baccalaureate degree, he financed his education through paid internships with major corporations. Upon graduation, he went to work for a Fortune 50 corporation he had interned with, and joined their ethical hacking team. After a few years he accepted
a position with another corporate giant, a government contractor, and rose to an executive position. With this company he had the opportunity to pursue his Master’s degree, which was online, and his Juris Doctorate. At the time of his interviews, Leighton had begun pursuing his PhD online.

Leighton’s teaching experience began after completing his law degree. This first experience was classroom-based instruction at his alma mater, and when the institution launched an online MBA program, he was recruited to develop courses which he would also teach. He applied to teach at the research site a few years later, when he heard about the unique nature of the curriculum in his field of expertise. Because of the tools available, he prefers online instruction, especially when student engagement is embedded in the pedagogy.

He had obtained significant training on the learning management system (LMS) prior to developing and teaching his online courses, but in terms of becoming an online instructor, he felt he drew mostly from his students to determine what worked in the classroom pedagogically:

“A lot of professional development specifically with the tools and the learning management system, that’s more the operational piece, and from the instructional piece, it was, I’ll be honest, it was mostly trial and error, trying to determine what students responded to or what they did not respond to…”

Leighton was well regarded by his students as indicated by the results of his student evaluations, as compared to the average performance of his peers, as displayed in Table 24. In the view of his students he excelled in Student –Centered Approach (3.74) and Effectiveness Overall (3.66), exceeding the average of his peers by 3.89% and 4.27%, respectively, for those criteria of evaluation. His Average Performance Score (3.67) exceeded his peers average by 3.97%. Overall, he exceeded the average scores of
his peers by 5.38% based on the original criteria for selection, and 4.10% on the revised criteria for selection.

Table 24

*Leighton: Aggregate Performance of Participant*

<table>
<thead>
<tr>
<th></th>
<th>Original Selection Criteria</th>
<th>Revised Selection Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution to Learning</td>
<td>3.43</td>
<td>5.38%</td>
</tr>
<tr>
<td>Course Interaction</td>
<td>3.44</td>
<td>6.10%</td>
</tr>
<tr>
<td>Teaching Practices</td>
<td>3.56</td>
<td>2.25%</td>
</tr>
<tr>
<td>Student Centered Approach</td>
<td>3.60</td>
<td>3.89%</td>
</tr>
<tr>
<td>Effectiveness Overall</td>
<td>3.51</td>
<td>4.27%</td>
</tr>
<tr>
<td>Average Performance Score</td>
<td>3.53</td>
<td>3.97%</td>
</tr>
</tbody>
</table>

*Interpretation of Narrative*

When asked to describe what teaching presence meant to him, Leighton identified it in terms of engagement with students and responsiveness to student needs and expectations, stating:

“Being present, well I think it takes regular participation within asynchronous forums, I think its timely updating of the gradebook… and with the expectation of online students its really returning, emails, calls, texts in a 12 to 24 hour period.”

This interpretation of teaching presence, which recognized his role to provide service to students, but also an obligation to meet their expectations due to their desire and financial commitment to their education. This may be rooted in his own background,
but characterized his interest in helping them be successful. This was demonstrated by comments such as:

“… my mentality is that each one of my students, and I think this is just comes from the corporate world so much, is that each one of my students is paying to be there … so they’re almost like a customer, so it’s a customer relationship kind of thing that I look at.”

“My role was to help, so my role was to kind of harness the energy that these students had clearly exhibited, and to help them remove any barriers that may have been coming up for them to be able to be successful … in helping them get some tools … and then act as an expert and sounding board for them …”

To ensure he is ready to serve his students, Leighton starts with preparing himself by developing his instructional plan, reviewing the entirety of the course and supplementing materials to ensure accuracy, currency and relevance to the student. By immersing himself in the course content and understanding the “flow of the course”, he is able to develop his instructional strategies as well as his administrative and academic expectations for performance. When these actions are completed he ensures that the course environment is ready and includes clear communication of his guidelines.

“First and foremost I would always get the requisite materials that would be required, I tend to prefer those in eBook format, versus paper … it just helps me to be able to parse the information a little bit better … I personally would start looking at major course concepts.”

“I kind of shred the syllabus and figure out exactly what topics for the rest of the class are going to be due at any given point, and start building my synscesion lectures in anticipation for those events that are going to occur.”

“I build the flow of the course … go in there and get due dates formalized a little bit, so you can see the roadmap of the course, in addition to that is defining my late policy, publishing that in the syllabus, and setting up the assignments with auto deducts in case there is late submittal … making sure the syllabus is live, having an announcement welcoming students, and ensuring that they have my contact information, also going through the shell and making sure there is no extraneous information in there … it’s a kind of cleanup effort.”
When students have access to the course during the preview period Leighton’s focus is on building rapport and forming authentic relationships with students. At this early stage, his interest is in understanding what is motivating his students as opposed to dealing with the content of the course or academic expectations, as he feels they are posted and available to students through the course materials.

“The activity I would have during that preview period was really the introduction thread and that would enable students to have a chance to post their bios, and sort of have an initial discussion to kind of get the students a little more comfortable prior to the time period when we start diving into the academic side.”

“On the student side, one thing that I kind of stressed up front was not only saying who you were and what your bio was, but where you were looking to go, because that kind of really helped me understand where each student was, because what was the means to the end … so they could show what their goal was, why they were seeking this additional higher education, and then trying to help them get there …”

“I think students respect people that show a genuine interest in their advancement, so I really take a lot more time in trying to get to know the person, getting to know their station in life, but its powerful for me because then I can continually tie things throughout that entire course based on what I’ve learned …”

As the course progresses into the first week, Leighton described how he continued to establish the deeper relationships he felt served students. These actions offer students a way to connect with him and communicates his interest in them as individuals, and helps them increase their comfort in the online environment. He feels the pattern of presence that he establishes identifies his commitment to being responsive to them and aids him in being more effective in helping them learn.

“For me at least, you need to be super active at the beginning … because they are always nervous starting a new class … the classes I taught it was often a student’s first course in the program, so I think going the extra mile and making them feel at ease, really helps them …”
“I will reply to everyone's threads … I think everyone likes to feel that they're having some interaction with the faculty member, so … I try and read in detail what that person's thoughts are, and ask them customized questions or additional open ended questions where they can specifically see that I've read what they've previously posted. So to me, instead of asking just some random questions or something like it shows the student that I've taken the time to synthesize exactly what they're trying to say and then question them further on it, it builds that rapport, in the first week or two, that really, it’s a relationship, and that relationship lasts throughout the course.”

Throughout the remainder of the semester, Leighton’s primary actions relate to being actively engaged through feedback, while reinforcing a culture of active participation and engagement. He models an active presence that students recognize and emulate, leading them to become more self-directed and collaborative during the course.

“I kind of just follow that same kind of strategy similar to that first week, so students really like the consistency of that, it really builds their expectation of what they need to do in subsequent weeks … I respond to any questions that come in regarding the course or subject material just trying to respond to those as quickly as possible, in addition to that just adding some external materials to doc share, and tying discussions to material that I've posted to doc share that's time relevant … they almost start feeling, and I don't know how to say this other than, they almost start feeling guilty and they don't want to let me down, so week 3 they are exceptionally active…”

“… my philosophy of encouraging classroom discussion, and not wanting to overtake that classroom discussion … so with the first week [in each module] I won't really participate in the discussion forums a lot … and that’s really on purpose to try and stimulate classroom discussion among students themselves, before coming in and interjecting … I find that students a lot of the time will be focused on just answering me as the professor in the class, instead of focusing on what other students are saying or bringing up”

Leighton’s underlying actions of forming authentic relationships with his students reinforce his intentions of connecting with students in authentic ways and ensuring engagement and interaction that supports learning. He intentionally builds bonds with his students which extend beyond the classroom, in order to help them meet their personal and professional goals. He feels he derives personal benefit from this relationship as well,
recognizing the value and expertise students bring into the classroom, as reflected in these statements:

“… it’s trying to get to know the student, get to know their work life experiences … the other thing that I emphasize is that the connection I have with the students is more than the four modules that we’re together, I really want to know this person, I really want to as a professional stay in touch and continue to help in ways that would benefit their career…”

“First and foremost I think students … want to have the ability to go in and actually learn topics that they can apply the next day at their respective employer. So all of the work experiences I had, in going up into the executive ranks … I think immediately gives me that credibility in our discussions, and that kind of breaks down the wall per se, that student-instructor wall, to where the communication becomes two way, and I learn things from them just as much as they learn things from me, because I love hearing what they're experiencing at their employer, and trying to relate that to experiences that I've had in my life.”

Leighton communicated an academic tone in his courses by modelling behaviors that challenged students and reinforced his expectations of participation. His approach was based on building trust through authentic relationships and finding relevance for students, which led them to emulate his behaviors and increases their engagement in the course.

“I set a pattern the first two modules, so four weeks together and they feel comfortable in that pattern, I'm thinking with 90% certainty, and just keep that pattern up on their own, it kind of goes into autopilot a little bit …”

“I think students respect effort, so students see the amount of effort that I've put in the course. I've had students say they feel guilty if they don't do well in my class, or they feel like they're not putting in as much if not more effort than me, so I hate to say I subscribe to the philosophy of outwork them and make them feel guilty, but I kind of do, so it’s non-verbal, I never say it, I never do anything about it, it’s just something that I can almost see a switch within students, that they want to make sure that they're doing more than me…”

However, the academic standards he sets are not purely based on participation, he clearly communicates the requirements for performance through rubrics and substantive
feedback, supporting their development as they progress through the course and acknowledging their successes.

“One reason that I publish rubrics for each assignment in advance, to me that sets the academic tone … and really creates an open dialogue between myself and the student about what my expectations are, and how they can get there, and that it’s not just a journey that they have to take by themselves, but it’s a point of discussion that we can discuss moving forward …”

“So I try and give concrete examples of comments and online submittals to be able to show that I’ve read the assignments and these are areas where I think students could improve those assignments, or did well on those assignments. I think far too often a lot of people grade and assess with what's wrong with an assignment versus what's right with the assignment.”

Leighton believes that an increased level of intellectual curiosity can be inspired by creating a relevant learning environment and reinforcing student’s contributions through acknowledgement. He feels that students are motivated to take ownership of their learning and extend themselves beyond the “standard role of the student” in such an environment and a shared responsibility for each other’s learning is promoted.

“… from an intellectual curiosity standpoint its really trying to get these real world business applications socialized at the very beginning and institutionalize them [the students] to think about everything that they read, and be able to apply that or question how that would be effective in the real world business environment. So it almost happens automatically, it’s like a switch flips in that module three timeframe”

“I think they feel that they've seen the work that’s gone into those first two weeks and they almost act as leaders or stewards in the course, they seem to have an exceptionally vested interest at that point, after the four weeks together, and they kind of own it, and if it drops off I go back into an overly active facilitator again, it just really depends on the class, and I've had exceptional luck being able to hand the reins over… So what I'm finding are students are going out and doing independent research and then writing a reflection or a position statement of what they feel about that, so they are really starting to bring in new material into the classroom…”

Because of his technical background, Leighton gravitated to online instruction, however, he reflected that the value of online delivery was how it helps him to form
authentic and extended relationships with students. His sincerity and concern for staying in touch with his students are conveyed by his actions as much as his words.

“I don't like to do online just to do online, I like that student engagement piece, and making sure that we have that student engagement piece embedded within the pedagogy … I think that’s the perfect avenue to build that student instructor rapport.”

“… to me the relationship that we have as student-professor, is much more and much longer than the 8 weeks we are together, and so I would encourage them to connect with me on LinkedIn, that way if there was any job changes on either side that way we could always stay in touch, in case they wanted to seek additional education, I could potentially provide a letter of recommendation or if I had job postings available where they might be qualified, I could communicate it to my LinkedIn network.”

**Emergent Themes – Category Identification**

Using temporal references within the transcripts to associate specific actions to the phases of course delivery, the analysis revealed the following sequence of activities undertaken by Leighton during the term. The actions in Table 25 below are displayed in order of frequency mentioned, indicating the level of importance to Leighton.

**Table 25**

*Leighton: Actions Establishing Teaching Presence (Temporal Context)*

<table>
<thead>
<tr>
<th>Course Preparation</th>
<th>Preview Period</th>
<th>First Week</th>
<th>Remaining Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Instructional Plan</td>
<td>Build Rapport</td>
<td>Form Authentic Relationships</td>
<td>Provide Feedback</td>
</tr>
<tr>
<td>Topic Familiarization</td>
<td>Form Authentic Relationships</td>
<td>Initiate Interactions</td>
<td>Reinforce Expectations</td>
</tr>
<tr>
<td>Content Review</td>
<td>Available for Support / Assistance</td>
<td>Shared Responsibility for Learning</td>
<td>Shared Responsibility for Learning</td>
</tr>
<tr>
<td>Supplement Course Materials</td>
<td>Set Expectations</td>
<td>Available for Support / Assistance</td>
<td>Facilitate Discourse</td>
</tr>
<tr>
<td>Post Announcements</td>
<td>Post Announcements</td>
<td>Build Rapport</td>
<td>Available for Support / Assistance</td>
</tr>
<tr>
<td>Check Course Schedules</td>
<td>Send / Post Welcome Letter</td>
<td>Note Attendance and Participation</td>
<td>Supplement Course Materials</td>
</tr>
<tr>
<td>Check Technology</td>
<td>Initiate Interactions</td>
<td>Communicate Clearly and Frequently</td>
<td></td>
</tr>
</tbody>
</table>
The primary actions associated with each of the phases are described as follows:

- **Course Preparation: Develop Instructional Plan** – The consideration of course learning objectives, activities that assists in student achievement, identification of resources and discussion questions that motivate students and generate interest in the topics; the creation of a weekly plan which is referred to and executed to ensure learning objectives are attained.

- **Preview Period: Build Rapport** – Establish and develop a collegial or peer-level relationship with students based on common interests, experiences, or understandings that builds trust and enhances communications.

- **Preview Period / First Week of Class: Form Authentic Relationships** – The development of authentic relationships with students, connecting on areas of personal interests related to the course or professional goals, creating a foundation of trust in the instructor and a basis for open communication.

- **Remaining Weeks: Provide Substantive and Constructive Feedback** – Provide feedback to students that stimulates thinking, challenges them to view their responses through a different perspective, or provide a path that offers deeper insight into a topic area.

A visual representation was constructed to provide the reader a contextualized understanding of the activities being described by the instructor. Using numeration techniques, actions with respect to establishing teaching presence were refined and the most frequently mentioned actions in each phase of the course delivery were identified thematically to simplify the understanding of the case. This visual representation of the
themes generated from the temporal analysis of the actions identified by Leighton is depicted in Figure 13, with the primary action for each phase depicted in shaded boxes.

![Diagram](image)

**Figure 13.** Leighton: Contextual representation of primary actions when establishing teaching presence.

To gain greater insight into Leighton’s actions related to establishing his teaching presence, groupings of common themes generated from the analysis of the transcripts were made using the process of subsumption. Themes associated with these practices were not linked to the timeline of the course, but rather associated with the overall description of the purpose of the activities carried out by the instructor. To gain an understanding of the relationships between and among the themes and identify primary actions associated with establishing presence, a cluster analysis for word similarity within the themes was performed using the Nvivo software. Using numeration techniques, the
themes were then ranked based on the frequency they appeared in the interviews, indicating the level of importance to Leighton, and are displayed in Table 26. The Pearson correlation coefficient reflecting the relationship of the theme to teaching presence is also displayed in Table 26.

Table 26

Leighton: Practices Associated with Establishing Teaching Presence

<table>
<thead>
<tr>
<th>Practices Associated with Establishing Teaching Presence</th>
<th>Weighting Based on % References</th>
<th>Pearson’s Coefficient (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form Authentic Relationships</td>
<td>12.35</td>
<td>0.799</td>
</tr>
<tr>
<td>Set or Reinforce Expectations</td>
<td>9.88</td>
<td>0.862</td>
</tr>
<tr>
<td>Build Rapport</td>
<td>9.88</td>
<td>0.747</td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>8.64</td>
<td>0.668</td>
</tr>
<tr>
<td>Serve as a Resource to Students</td>
<td>7.41</td>
<td>0.698</td>
</tr>
<tr>
<td>Provide Guidance</td>
<td>7.41</td>
<td>0.646</td>
</tr>
<tr>
<td>Acknowledge Student Contributions</td>
<td>7.41</td>
<td>0.627</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>7.41</td>
<td>0.624</td>
</tr>
<tr>
<td>Provide Substantive and Constructive Feedback</td>
<td>6.17</td>
<td>0.583</td>
</tr>
<tr>
<td>Include Students in Teaching Opportunities</td>
<td>6.17</td>
<td>0.533</td>
</tr>
<tr>
<td>Communicate Clearly and Frequently</td>
<td>4.94</td>
<td>0.706</td>
</tr>
<tr>
<td>Humanize Course</td>
<td>4.94</td>
<td>0.573</td>
</tr>
<tr>
<td>Develop Instructional Plan</td>
<td>3.70</td>
<td>0.522</td>
</tr>
<tr>
<td>Send and Post Welcome Letter</td>
<td>3.70</td>
<td>0.606</td>
</tr>
</tbody>
</table>

The Pearson correlation coefficient generated from the analysis was also used as an indicator of influence to determine the relationships among the themes. A visual representation of these relationships is displayed in Figure 14. Themes most highly correlated with establishing teaching presence were identified as primary themes and are depicted in shaded boxes.
Further analysis of the interview transcripts revealed that Leighton’s actions taken in establishing this presence could be aligned with two underlying intentions: (a) to ensure engagement and interaction that supported learning, and (b) to connect with students in authentic ways. To understand how his actions supported and fulfilled these intentions, a cluster analysis based on word similarity within the themes was performed to identify relationships between the actions taken in establishing presence and the three identified intentions. Figure 15 provides a visual representation of the results. Only those actions showing a coefficient value of .70 or greater are depicted in the representation, to provide greater clarity in understanding the primary actions associated with fulfilling Leighton’s intentions.
Using the Pearson correlation coefficient generated from the analysis as a measure of the relationship between the actions and the intentions, it was determined that overall Leighton’s actions in establishing presence most greatly supported his intention of ensuring engagement and interaction that supported learning ($r = 0.890$). What emerged from this analysis was the identification of a key action involved in fulfilling both intentions: forming authentic relationships with students. This action is defined as:

- **Form Authentic Relationships** – The development of authentic relationships with students, connecting on areas of personal interests related to the course or professional goals, creating a foundation of trust in the instructor and a basis for open communication.

As a result of the relationships that are formed with the students he teaches, Leighton builds a trusting learning community with his students, whereby students are actively engaged and share in the responsibility of contributing to the learning experience of their peers at a level that is in keeping with the standards he sets. Table 27 provides a list of the primary actions identified by Leighton with respect to setting the academic
climate in his classroom and those he felt helped inspire intellectual curiosity among his students. These actions are listed in the order of frequency mentioned by Leighton, indicating the order of importance to him.

Table 27

*Leighton: Practices Associated with Setting Intellectual Climate*

<table>
<thead>
<tr>
<th>Setting Academic Climate</th>
<th>Inspiring Intellectual Curiosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Scholarly Behavior</td>
<td>Acknowledge Student Contributions</td>
</tr>
<tr>
<td>Challenge Students</td>
<td>Identifying Relevance</td>
</tr>
<tr>
<td>Set / Reinforce Expectations</td>
<td>Promote Shared Responsibility for Learning</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>Listening and Asking Questions</td>
</tr>
<tr>
<td>Promote Shared Responsibility for Learning</td>
<td>Showing Active Interest / Passion for Course</td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>Supplement Course Materials</td>
</tr>
<tr>
<td>Identify Learning Goals</td>
<td>Creatively Present Materials</td>
</tr>
<tr>
<td>Providing Substantive and Constructive Feedback</td>
<td></td>
</tr>
<tr>
<td>Respond to Inquiries</td>
<td></td>
</tr>
</tbody>
</table>

Figure 16 provides a visual representation of these themes and the relationships that emerged during the exploration of the implications related to setting academic climate and inspiring intellectual climate.
Of the actions described by Leighton, modeling scholarly behavior emerged as the primary action associated with establishing an academic climate in the course room. Three actions had equal weight with respect to inspiring intellectual curiosity in Leighton’s courses: acknowledging student contributions, identifying relevance of materials, topics and assignments to the student’s interests, and promoting a shared responsibility in the learning environment. Of the actions described by Leighton, the action of sharing the responsibility for learning was common to both academic functions. These actions associated with the academic and intellectual climate are defined as follows:

- Model Behavior – The instructor establishes a prototype for thinking and classroom behavior through personal example, then encourages students to meet performance requirements while overseeing, guiding and directing students as they emulate or adapt instructor’s approach.
• Acknowledge Student Contributions – A proactive incorporation of student contributions (postings, presentations, etc.) in course activities which draws students into the course, capitalizes on collaboration, creates opportunities for student-led teaching, and acknowledges a shared agency in learning.

• Relevance to Student – Preparation of course content, activities, and assignments acknowledging student perspective and interests, and tailoring course assignments to the needs and interests of the student.

• Promote Shared Responsibility for Learning – Provide students an active role and responsibility in the teaching and learning process with an active voice in the topics covered in the course or path of learning, inspiring collaborative contribution, personal accountability, and engagement in learning community; instructor provides guidance where needed.

Subject Case Results: Pavia

Participant Profile

Pavia earned her baccalaureate degree from a traditional institution, but earned her MBA in an evening program designed for the working adult learner. She later earned her doctoral degree through an online program which incorporated face-to-face residencies on topics related to the dissertation process. Shortly after finishing her MBA she was recruited to teach as an adjunct faculty member by a for-profit institution focusing on adult learners. During this first teaching experience in the face-to-face classroom, she enrolled in her online doctoral program. While working on her doctorate, she was provided her first online teaching opportunity when the institution she was
teaching with launched an online MBA program. She had several years of online teaching experience at both graduate and undergraduate levels, with several institutions, prior to joining the faculty at the research site.

When recalling the training she received when learning to become an online instructor, she responded:

“I'm laughing only because the majority of it was self-learning, self-teaching, that would be the first thing that pops into my head. That’s my first answer, but secondarily, every organization offers some form of it that I've been associated with, some of it’s been more intense and at the same time others have been more lowest common denominator. Treating everybody like they have never taught online before, some of it’s been self-paced, some of it’s been very structured.”

Pavia ranks slightly above the average performance when regarded by her students as indicated by the results of her student evaluations, as displayed in Table 28; however, she ranks among the highest in contributing to the learning of her students (3.66). In the view of her students she excelled in Teaching Practices (3.64) and Student – Centered Approach (3.63), exceeding the average of her peers by 2.25% and 0.82%, respectively, for those criteria of evaluation. Her Average Performance Score (3.57) exceeded her peers average by 1.17%. Overall, she exceeded the average scores of her peers by 3.94% based on the original criteria for selection, and 1.19% on the revised criteria for selection.
Table 28

**Pavia: Aggregate Performance of Participant**

<table>
<thead>
<tr>
<th>Original Selection Criteria</th>
<th>Contribution to Learning</th>
<th>Course Interaction</th>
<th>Teaching Practices</th>
<th>Student Centered Approach</th>
<th>Effectiveness Overall</th>
<th>Average Performance Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>3.43</td>
<td>3.44</td>
<td>3.56</td>
<td>3.60</td>
<td>3.51</td>
<td>3.53</td>
</tr>
<tr>
<td>Pavia</td>
<td>3.66</td>
<td>3.48</td>
<td>3.64</td>
<td>3.63</td>
<td>3.53</td>
<td>3.57</td>
</tr>
<tr>
<td>Difference</td>
<td>+.23</td>
<td>+.04</td>
<td>+.08</td>
<td>+.03</td>
<td>+.02</td>
<td>+.04</td>
</tr>
<tr>
<td>% Difference</td>
<td>6.71%</td>
<td>1.16%</td>
<td>2.25%</td>
<td>0.82%</td>
<td>0.57%</td>
<td>1.13%</td>
</tr>
<tr>
<td>Average %</td>
<td>Original Criteria</td>
<td>3.94%</td>
<td>Revised Criteria</td>
<td>1.19%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Revised Selection Criteria  |                          |                    |                    |                           |                       |                           |

**Interpretation of Narrative**

Pavia described teaching presence in terms of engagement with students and responsiveness to student needs and expectations when asked to define what it meant to her:

“Being present as an online instructor means logging into the classroom on a regular and frequent basis for purposes of posting into the discussion board … meaning communication with the students on the discussion board and posting announcements, posting on the discussion boards, answering individual student emails, and/or grading with numbers and with feedback.”

Throughout the series of interviews with Pavia, this interpretation of teaching presence was demonstrated by comments made, whereby she clearly communicated her role in the learning process was to be a resource and to create engagement. For example she commented:

“Well the presence in the classroom is all designed so that the students are learning something, so my presence there has a purpose, and the purpose is to further the students learning.”
“…facilitating things, not necessarily answering every student's posts, or making a remark, but trying to rotate it among the students, reading them is one thing, reading their discussion postings, but I need to comment, part of my presence is actually making postings that are helping the students to learn, taking them in a certain direction, maybe answering their own questions, or helping them answer their own questions, and getting them to talk to each other. “

In preparation of teaching, Pavia ensures that she has the time available to keep her commitment to interaction and feedback, while planning her instructional strategies. She is schedule oriented and wants to be responsive when students expect her interaction or feedback:

“I prepare myself … I make sure my calendar is available, my calendar is clear, because there are live components, in other words synchronous, in addition to asynchronous activities, I update my calendar with all of those, synchronous and asynchronous activities like if I have grading that needs to be done … So for example, the end of the week I would note along with 48 hours when my grades are supposed to be … I like to have my grades completed, and the same thing with the final grades, especially the final, when the final grades are due.”

When students have access to the course she then starts connecting with students, forming relationships and initiating interactions with them are her primary focus. She is aware of the importance of engaging students with each other, and that she may need to start things for them, modeling her expectations of participation.

“Number one is you get in the class the first day. You have to be there and post something for the students so they know you're there.”

“The students like that opportunity to get to know not only me, but each other. So if there's a board, they're looking at introductions and biographies from each other from their cohort or their colleagues in addition to me.”

“A starter post is a response to the discussion question, you're answering your own question on the discussion board so that the students know you're there and to set an example for them.”

As the first week of the course gets underway, Pavia focuses on getting students engaged, by actively reaching out, initiating interactions and building rapport. These
actions focus not only on confirming for them that she is available to them, but on bringing students into the environment to participate, as demonstrated in these comments:

“I think the students are testing the instructor the first week or so, to see if we are going to follow through on what we say, when it comes to grading or policies or procedures … They're trusting the faculty to be there when they say they're going to be there and to follow that pattern of behavior.”

I will post something for everybody in the discussion board that says "Hello everybody, the week is moving quickly, if you haven't already posted, make sure that you follow the guidelines of the syllabus or the requirements of the syllabus and make your posts as soon as you can", So I'll post group things on the board if I don't see the class is doing something.”

“I'm actually there in the classroom every day and posting announcements encouraging them to do things if I don't see anybody doing any work, meaning not posting on the boards, not submitting work, I'll send them an email.”

Throughout the remainder of the semester, Pavia’s actions focus on actively providing feedback that will support student success, while reinforcing the expectations set at the early stages of the course. She believes in actively communicating with students, to ensure they not only are aware she is cognizant of their level of involvement, but also to maintain engagement in the course when students get distracted.

“They know I'm there and so it stimulates the discussion, so I think one of the hallmarks I add is that I read their posts and I do make some substantial comments, but I always ask a question, I try very diligently, I ask a provoking question to them or to the class, sometimes I'll respond to one student and I'll say to all, make sure you have a chance to read this post and tell the rest of the class your opinion. Do you agree, do you disagree, and why, so I think students get used to that, they expect that after you do that for a couple of weeks in a row.”

“Communicate, communicate, communicate, because that seems to be what I see as the biggest challenge among the group is, they don't communicate, or can't or won't at the same time or the same way, and then there's a communication breakdown which then leads to non-performance or poor performance.”

Pavia’s actions support her underlying intentions of engaging students through interaction, connecting with them so that she can be a resource and provide guidance to
enhance their success in the course. Pavia’s actions in establishing her presence were substantially grounded in her strong communication skills, and showed that she was there to engage them in the academic activities and saw it as a role necessary to fill.

“I think just the fact that they know that [Name] is in the classroom … that the person or instructor is actually there, that’s half of it. It’s just being there. At least. Then it’s what’s said, how are things posted, is the feedback there, is the discussion there …”

“That frequency of being in that class reading, writing, posting, responding, is for many different reasons but it’s important that students know that they have a leader there who’s going to keep up with what’s happening.”

“The students expect that I'm going to be there for them to answer their questions, the email, answering personal emails from students is every day, because students are working, they need attention, they're working on their assignments, and they want to move forward, and sometimes they'll use my input to go forward.”

Pavia believes she communicates an academic tone in her courses through her actions and her messages to students. She reinforces that by being present and responsive to them, modeling the expected behavior of students, and providing clear and substantive feedback on assignments. This belief is reflected in the following statements:

I generally do a starter post at the beginning of the week to get the students going on the board, so they can model their answer after mine,

“The students are looking for consistent frequent behavior, frequent interaction with the faculty person on the discussion board, through the announcements, and through the grading, they want it to be consistent, and they want it to be frequent, and timely … and they love that when they get it.”

“To set the academic tone … I think the announcements are doing that … I talk about what we are going to try to learn this week. What are our learning objectives … I think those announcements set a tone, and again they are consistent. There is always an announcement there at the beginning of the week that says here’s what we are going to focus on this week, there's always an announcement at the end of the week here's what we talked about.”

Pavia feels that the peer engagement in her courses, and through her acknowledgement of their role and contributions, inspires them to be more engaged in the
learning process. By ensuring the materials are relevant and by letting students have a voice, she believes an increased level of intellectual curiosity is supported among peers in the class:

“My role is to make sure that it does have some relevance to the course … that it is within the boundaries, and then of course that its stays in the tone of it professional, respectful, and that it is a presentation of each respective students ideas or experiences or point of view … at the same time that it’s not shutting anybody else down, that it’s not offensive to anybody else or disrespectful”

“It creates a less intimidating environment and the students are less reliant on the instructor to carry the conversation or to guide it. They ask each other enough questions that the conversation can continue, and that's what it’s all about, it’s continuing the dialogue to see where the dialogue goes, because as … we want the conversation go and let it be learner led.”

“We try to make it relevant to their work place now and bring things back to their current environment. What’s going to happen, what can they relate to right now, or maybe something they've experienced … so if I can find ways as the faculty to engage them because there is some part of this discipline that we're studying that's part of this class that's going to get them to pipe up, it’s my obligation as a faculty member, and my joy, to actually do that.”

Although Pavia saw teaching as a natural outgrowth of her career and expertise, she reflected that it was most rewarding when receiving feedback from students that communicates they had a positive learning experience.

“I just got an evaluation from a school where I had lots students saying how much they enjoyed the class, how much they learned, and you know in general we see a lot of the surveys containing the dissatisfied students, the ones who didn't get the good grade, who didn't work hard enough, who take it out on the instructor in the evaluation, but I frequently get evaluations with positive feedback from students.”

Emergent Themes – Category Identification

Using temporal references within the transcripts to associate specific actions to the phases of course delivery, the analysis revealed the following sequence of activities undertaken by Pavia during the term. The actions in Table 29 below are displayed in order of frequency mentioned, indicating the level of importance to Pavia.
Table 29

Pavia: Actions Establishing Teaching Presence (Temporal Context)

<table>
<thead>
<tr>
<th>Course Preparation</th>
<th>Preview Period</th>
<th>First Week</th>
<th>Remaining Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Instructional Plan</td>
<td>Form Authentic Relationships</td>
<td>Initiate Interactions</td>
<td>Provide Substantive Feedback</td>
</tr>
<tr>
<td>Post Announcements</td>
<td>Initiate Interactions</td>
<td>Build Rapport</td>
<td>Reinforce Expectations</td>
</tr>
<tr>
<td>Prepare Welcome Letter</td>
<td>Note Attendance and Participation</td>
<td>Set Expectations</td>
<td>Facilitate Discourse</td>
</tr>
<tr>
<td>Check Schedules</td>
<td>Post Announcements</td>
<td>Available for Support/ Assistance</td>
<td>Available for Support/Assistance</td>
</tr>
<tr>
<td>Content Review</td>
<td>Set Expectations</td>
<td>Note Attendance and Participation</td>
<td>Follow Up with Non-Participants</td>
</tr>
<tr>
<td>Check Technology</td>
<td>Send / Post Welcome Letter</td>
<td>Follow Up with Non-Participants</td>
<td>Post Announcements</td>
</tr>
</tbody>
</table>

The primary actions associated with each of the phases are described as follows:

- **Course Preparation: Develop Instructional Plan** – The consideration of course learning objectives, activities that assist in student achievement, identification of resources and discussion questions that motivate students and generate interest in the topics; the creation of a weekly plan which is referred to and executed to ensure learning objectives are attained.

- **Course Preparation: Post Announcements** – Utilize centralized course area to post important reminders that inform or update students of course schedules, due dates, or other critical schedule items that may impact the delivery of the course.

- **Preview Period: Form Authentic Relationships** – The development of authentic relationships with students, connecting on areas of personal interests related to the course or professional goals, creating a foundation of trust in the instructor and a basis for open communication.
• Preview Period / First Week of Class: Initiate Interactions – The proactive engagement of students through communications of various forms (e.g., email, postings) which inspire student response and involvement in the course activities.

• First Week / Remaining Weeks: Set / Reinforce Expectations: Setting clear expectations of rigor and performance commensurate with course level and degree program in student friendly language, providing these in written and verbal form, and reinforcing them in practice through clear instructions, examples, and formative feedback.

• Remaining Weeks: Provide Substantive and Constructive Feedback – Provide feedback to students that stimulates thinking, challenges them to view their responses through a different perspective, or provide a path that offers deeper insight into a topic area.

A visual representation was constructed to provide the reader a contextualized understanding of the activities being described by the instructor. Using numeration techniques, actions with respect to establishing teaching presence were refined and the most frequently mentioned actions in each phase of the course delivery were identified thematically to simplify the understanding of the case. This visual representation of the themes generated from the temporal analysis of the actions identified by Pa is depicted in Figure 17, with the primary action for each phase depicted in shaded boxes.
To gain greater insight into Pavia’s actions related to establishing her teaching presence, groupings of common themes generated from the analysis of the transcripts were made using the process of subsumption. Themes associated with these practices were not linked to the timeline of the course, but rather associated with the overall description of the purpose of the activities carried out by the instructor. To gain an understanding of the relationships between and among the themes and identify primary actions associated with establishing presence, a cluster analysis for word similarity within the themes was performed using the Nvivo software. Using numeration techniques, the themes were ranked based on the frequency they appeared in the interviews, indicating the level of importance to Pavia, as displayed in Table 30. The Pearson correlation coefficient reflecting the relationship of the theme to teaching presence is also displayed in Table 30.
Table 30

**Pavia: Practices Associated with Establishing Teaching Presence**

<table>
<thead>
<tr>
<th>Practices Associated with Establishing Teaching Presence</th>
<th>Weighting Based on % References</th>
<th>Pearson’s Coefficient (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiate Interactions</td>
<td>13.54</td>
<td>0.786</td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>11.46</td>
<td>0.786</td>
</tr>
<tr>
<td>Form Authentic Relationships</td>
<td>10.42</td>
<td>0.902</td>
</tr>
<tr>
<td>Build Rapport</td>
<td>10.42</td>
<td>0.904</td>
</tr>
<tr>
<td>Set or Reinforce Expectations</td>
<td>9.38</td>
<td>0.722</td>
</tr>
<tr>
<td>Provide Guidance</td>
<td>9.38</td>
<td>0.782</td>
</tr>
<tr>
<td>Provide Substantive and Constructive Feedback</td>
<td>8.33</td>
<td>0.398</td>
</tr>
<tr>
<td>Communicate Clearly and Frequently</td>
<td>7.29</td>
<td>0.809</td>
</tr>
<tr>
<td>Develop Instructional Plan</td>
<td>5.21</td>
<td>0.631</td>
</tr>
<tr>
<td>Humanize Course</td>
<td>4.17</td>
<td>0.577</td>
</tr>
<tr>
<td>Note Attendance and Participation</td>
<td>4.17</td>
<td>0.521</td>
</tr>
<tr>
<td>Follow Up with Non-Participants</td>
<td>3.13</td>
<td>0.465</td>
</tr>
<tr>
<td>Send and Post Welcome Letter</td>
<td>3.13</td>
<td>0.544</td>
</tr>
</tbody>
</table>

The Pearson correlation coefficient generated from the analysis was also used as an indicator of influence to determine the relationships among the themes. A visual representation of these relationships is displayed in Figure 18. Themes most highly correlated with establishing teaching presence were identified as primary themes and are depicted in shaded boxes.
Further analysis of the interview transcripts revealed that Pavia’s her actions taken in establishing this presence could be aligned with four underlying intentions: (a) to ensure engagement and interaction that supported learning, (b) to connect with students in authentic ways, (c) to provide guidance and feedback that developed knowledge and critical thinking skills, and (d) to serve as a resource to share experiences and knowledge that guided learning. To understand how her actions supported and fulfilled these intentions, a cluster analysis based on word similarity within the themes was performed to identify relationships between the actions taken in establishing presence and the four identified intentions. Figure 19 provides a visual representation of the results. Only those actions showing a coefficient value of .70 or greater are depicted in the representation, to provide greater clarity in understanding the primary actions associated with fulfilling Pavia’s intentions.
Using the Pearson correlation coefficient generated from the analysis as a measure of the relationship between the actions and the intentions, it was determined that overall Pavia’s actions in establishing presence most greatly supported her intention of ensuring engagement and interaction that supported learning ($r=.911$). Also emerging from this analysis was the identification of a key action most highly related to fulfilling her intentions: forming authentic relationships with students. This action is defined as:

- **Form Authentic Relationships** – The development of authentic relationships with students, connecting on areas of personal interests related to the course or professional goals, creating a foundation of trust in the instructor and a basis for open communication.

Given that Pavia’s primary intentions and actions relate to ensuring engagement and interaction that supports learning, the implications for setting the academic tone of her courses and its influence on intellectual curiosity of her students was explored. Table
31 provides a list of the primary actions identified by Pavia with respect to setting the academic climate in her classroom and those she felt helped inspire intellectual curiosity among her students. These actions are listed in the order of frequency mentioned by Pavia, indicating the order of importance to her.

Table 31

*Pavia: Practices Associated with Setting Intellectual Climate*

<table>
<thead>
<tr>
<th>Setting Academic Climate</th>
<th>Inspiring Intellectual Curiosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Scholarly Behavior</td>
<td>Sharing Responsibility for Learning</td>
</tr>
<tr>
<td>Set / Reinforce Expectations</td>
<td>Acknowledge Student Contributions</td>
</tr>
<tr>
<td>Provide Substantive and Formative Feedback</td>
<td>Identifying Relevance</td>
</tr>
<tr>
<td>Sharing Responsibility for Learning</td>
<td>Showing Active Interest / Passion for Course</td>
</tr>
<tr>
<td>Understand Student Population</td>
<td>Listening and Asking Questions</td>
</tr>
<tr>
<td>Identify Learning Goals</td>
<td></td>
</tr>
</tbody>
</table>

Figure 20 provides a visual representation of these themes and the relationships that emerged during the exploration of the implications related to setting academic climate and inspiring intellectual climate.
Figure 20. Pavia: Practices related to setting intellectual climate.

Pavia’s ability to model scholarly behavior through examples in her own posts and performance emerged as the primary action associated with setting the academic tone in her courses. This was closely associated with her actions of setting and reinforcing expectations. The collaborative atmosphere created by Pavia in promoting a shared responsibility in the learning process in the classroom had a substantial influence on inspiring students’ intellectual curiosity in the topics of the courses she taught. This action was a common action found in both academic functions and was demonstrated mostly through active engagement and interaction in the discussions. Pavia’s primary actions are defined as follows:

- Model Behavior – The instructor establishes a prototype for thinking and classroom behavior through personal example, then encourages students to meet performance requirements while overseeing, guiding and directing students as they emulate or adapt instructor’s approach.
- Promote Shared Responsibility for Learning – Provide students an active role and responsibility in the teaching and learning process with an active voice in the topics covered in the course or path of learning, inspiring collaborative contribution, personal accountability, and engagement in learning community; instructor provides guidance where needed.

Subject Case Results: Yosef

Participant Profile

Yosef earned both his baccalaureate and MBA through traditional classroom-based programs. During his graduate programs he had the opportunity to teach undergraduate students as a teaching assistant. After starting his career with a major corporation, he completed a second master’s degree in an evening program while working, and pursued a third Master’s degree via an online program. His doctoral degree was earned in an online program that had embedded face-to-face residencies.

Coming from a family where both parents were teachers, he voiced a “desire to give back to others, to blend theory and practice.” When he was completing his third Master’s degree he had an opportunity to teach online and quickly found that “juggling both work, family and education, I definitely have an empathy for online students.” At this same time, he became involved in developing and teaching in a new hybrid program in his discipline of information security offered at the local university. After teaching online for three years, he became aware of the online programs at the research site, and applied for a teaching position. Shortly after joining the research site’s faculty, he also
joined another online institution, while disengaging from his previous teaching obligations.

While most institutions offered instructor training on the LMS technologies, Yosef explained that the last institution he joined had a formalized training requirement that covered both technology and pedagogy. He commented that he had not encountered other institutions with such rigorous requirements to join faculty. He described this training:

“…prior to even stepping foot into the first classroom for undergraduate, I had to take a 8 week training course, where it orients me with the system, they use Blackboard and it orients me in terms of everything from what the faculty handbook was, we had forum meetings, questions posed each week and we would answer those and we'd have to read part of their approach to teaching and once you passed that and got a certificate in that then you were able to teach in undergrad, and the same type of course to teach graduate courses was going through an 8 week training … at the graduate level, it was a little different than undergraduate level … they really wanted to make sure that beyond just a presence, that you were helping them with APA style guide formats for citations and references, and really trying to help with their understanding of what research is at the graduate level … you had to participate and if you didn't participate you wouldn't pass and then you wouldn't be eligible to teach the undergrad or the graduate course.”

As displayed in Table 32, Yosef was well regarded by his students as indicated by the results of his student evaluations and compared to the average performance of his peers. In the view of his students he excelled in Student –Centered Approach (3.70) and Teaching Practices (3.61), exceeding the average of his peers by 2.78% and 1.40%, respectively, for those criteria of evaluation. His Average Performance Score (3.61) exceeded his peers average by 2.27%. Overall, he exceeded the average scores of his peers by 0.43% based on the original criteria for selection, and 2.28% on the revised criteria for selection.
Table 32

**Yosef: Aggregate Performance of Participant**

<table>
<thead>
<tr>
<th>Original Selection Criteria</th>
<th>Contribution to Learning</th>
<th>Course Interaction</th>
<th>Teaching Practices</th>
<th>Student Centered Approach</th>
<th>Effectiveness Overall</th>
<th>Average Performance Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>3.43</td>
<td>3.44</td>
<td>3.56</td>
<td>3.60</td>
<td>3.51</td>
<td>3.53</td>
</tr>
<tr>
<td>Yosef</td>
<td>3.33</td>
<td>3.57</td>
<td>3.61</td>
<td>3.70</td>
<td>3.57</td>
<td>3.61</td>
</tr>
<tr>
<td>Difference</td>
<td>-.10</td>
<td>+.13</td>
<td>+.05</td>
<td>+.10</td>
<td>+.06</td>
<td>+.08</td>
</tr>
<tr>
<td>% Difference</td>
<td>-2.92%</td>
<td>3.78%</td>
<td>1.40%</td>
<td>2.78%</td>
<td>1.17%</td>
<td>2.27%</td>
</tr>
<tr>
<td>Average %</td>
<td>Original Criteria</td>
<td>Revised Criteria</td>
<td>2.28%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Revised Selection Criteria**

*Interpretation of Narrative*

Yosef described teaching presence in terms of engagement with students, stating:

“Being present as an online instructor means you have a lot of interactions with students, that means postings on a regular basis to the different forums, or responding … not just responding but asking questions of the students”

This interpretation of teaching presence, which recognizes the importance of interaction in facilitating learning, causes Yosef to alter his level of presence based on how engaged the students become. He acknowledges the relationship between presence and trust, which enables him to also show respect for the contributions of the students:

“Online presence becomes incredibly important, I would say from right before they start right on through the first week, they are still building a mental image, they are opening up from trust but they are still also trying to figure out what’s going to be expected from them and what they are going to get out of the course in that first day through that first week.”

“It’s not a uniform presence in every case, those times where I really think there's some enrichment from various perspectives I step back a little bit. I still check in each day, but I really let those discussions pursue versus my stepping in and feeling like they’re going to take my word because I'm the professor versus some very knowledgeable people in discussions online.”
To ensure students are aware of his presence in the content of the course, he starts with preparing himself by developing his instructional plan, reviewing the entirety of the course and supplementing materials to ensure accuracy, currency and relevance to the student. By supplementing the material in the course, he provides more current perspectives on the topics, giving the course a personality that reflects him:

“\[quote]\text{I fill in any gaps that might have been present either in course content or the textbook because … the material has a tendency to change over time … I look for better ways in which I can present more contemporary or anecdotal information to help with learning the topics we are covering … put together my answer key for grading purposes … then I also have to prepare my lecture notes, so I have to evaluate again where the material is, if I need to fill in any gaps with some relevant articles …}\[/quote]\n
When students have preview access to the course, Yosef’s actions are oriented around establishing rapport and creating a foundation for authentic relationships with the students. He recognizes the importance and challenges of creating a trusting and responsive environment as students are considering what the course will be like.

“\[quote]\text{Really the first day through the first week is probably one of the most important times out of the eight weeks that you're going to spend together with the online students to make sure that you have a presence. That first day it’s very critical to be highly responsive, being able to field questions that they might have on that first day … responding quickly to their questions because they are evaluating not only the content of the course, but also the expectation that goes along with the course on their end, so if you can answer questions as quickly as possible they can formulate that and have a better sense of wow am I going to have a professor that is real responsive or is this professor one that I'm going to have to pester him multiple times for some simple questions.}\[/quote]\n
“\[quote]\text{It’s about building trust and opening up, and also responding to their postings. So by my opening up myself as well as trying to build that trust, and because its online to bridge that geographical distance with them, they start opening up and share more about themselves, and it kind of feeds on itself, as they share more and you share more, it really helps build that trust environment, especially when we're online and we're not face to face, there's a lot that's inferred so you have to be really sure to be very positive when trying to communicate through written expression versus getting facial queues or web cams or any of that.}\[/quote]\n
Yosef described how he initiates interaction and interest in the course topics as the course progresses into the first week, continually supplementing what is available in the course in order to provide connections with the content for students. Using this level of unsolicited interaction, Yosef hopes to generate interest in the course while setting expectations of engagement and interaction through his own performance.

“I will also augment that first week by posting up articles … either if I've written it or if I've found it and I think its pertinent, this is an optional read, but if you do have time please read it and give me some feedback of your thoughts on it, so I'm engaging early on … so I'm specifically setting the expectation with them that I'm here to help facilitate your learning and make sure that you take advantage of that.”

“Online, for them to respond to one another, especially in those situations where they don't necessarily have a cohort or know one another, they are looking for the professor to set that bar for frequency of responses and getting back to folks, and then in turn, they start understanding response time as it were … they are getting a sense of that expectation that the professor is responding to me within a certain time, I expect not only the professor but hopefully other students within the course, my peer group, to respond as well.”

Throughout the remainder of the semester, Yosef’s primary actions relate to reinforcing the expectation of engagement while promoting the shared responsibility of learning that results in deeper inquiry into the topics of the course. His active presence in the course continues to be seen and felt by students, but he also recognizes when students can carry on without his involvement.

“I try to stay present, rule of thumb is twice a day, in the morning and in the evening, throughout the whole course, but there are times when students are very active and engaged with one another, and I don't feel my presence doesn't necessarily need to be in those situations … where you have very interactive students and very knowledgeable students, so there are times when the students can be very verbose and very willing to discuss especially on the discussion boards and the synccessions, and so I would say in terms of my presence in those situations where I have very knowledgeable and very talkative students, or very written expressive students in the forums, I usually step back a little bit because I believe that sharing those personal experiences, not just my own, is very valuable to the learning experience.”
Yosef’s actions of communicating frequently and being available to assist students support his underlying intentions of promoting a supportive and collaborative learning environment where he can serve as a resource to share knowledge and experience with his students. He particularly uses the discussion forums to accomplish his goals in the course, challenging students at times but always being conscious of treating them respectfully.

“You're there to help in any mode you can to help them learn whether it’s visually, audibly, you try with any technique based on each of the learners, but because they are adult learners you are really trying to facilitate their learning.”

“One of the great benefits of having forums, is when they're expressing, they're answering a discussion question and I have the opportunity to make a learning event out of it, to kind of push the scope or to help them provide a more solid foundation in the topic that they're learning at the time, and I think that greatly enhances their learning, when you do it incrementally.”

“I don't ask a question that I would feel would embarrass or go outside the bounds or the boundary or the topic of the course, so I think when other students read that they understand the tone in which I’m asking that, I'm not asking them to solve world hunger or do something extreme, but I'm trying to make relevance of the challenge question … I think they can clue in that there's a tone here, and consequently there is grading that I do with those postings, and so I provide a lot of feedback so that also helps with the academic tone, that feedback that I provide really establishes that.”

The primary focus of Yosef’s actions and intentions relate to serving as a resource to students where he can enhance their in-depth exploration of topics in the course. By approaching students through an inquiry model, Yosef communicates an academic tone in his courses by offering assistance and guidance that challenges students, not just giving them an answer or response. This approach acknowledges students contributions, helping them to develop deeper inquiry and critical thinking, while reinforcing his expectations of performance by modeling desired behavior.
“I'm really setting the tone of saying I'm here … with adult learners what I've found is that you really don't teach adult learners, you guide them and they have to do self-learning … you're there to really help facilitate that learning for them … I think we have teaching moments as professors, opportunities to help guide adults.”

“What I do, I specifically read through what their comment is, and I take a piece of it in a very constructive way … and I take that and then I ask a challenging question to kind of broaden their scope as it were on the topic, and sometimes that is helping them to connect the dots and sometimes its foundational to make them reflect on a particular concept, other times its to make them think of the same concept in a different way, so I think that is very beneficial, and I intentionally do that with each of the students to challenge them on a weekly basis … I try to pick out something that I think would be interesting as a follow on question, and I make sure that I get around to all the students to ask them at least one follow up question that allows them to stretch a little bit and maybe think of a particular topic a different way, so then they have another opportunity to respond to it, and that encourages them as other students within the course see my response, they kind of get a sense of what type of response to make and by doing that we start that weekly dialogue and drilling into those discussion questions … so I try to probe as best I can through the week to every student, by the end of the week.”

Yosef values the broad spectrum of student backgrounds which contribute to the learning in the course, which he believes inspires students to share in each other’s success in the course. He believes that an increased level of intellectual curiosity comes from that mutual respect of each other’s knowledge and experience which is developed in the learning environment.

“Where I really think that the curiosity comes from are when you get somebody with twenty thirty years and they start talking about stuff that the other students can relate to, but they're in different industries, I think that’s where you really get those good conversations … You get a lot more questions being asked … I think its collective, it’s really that mix of students and professor and content, depending on the course, that really brings out that curiosity in the student.”

“Usually its letting that conversation go, especially when you get those really good discussions, where it’s not just one or two people talking, where it’s a majority of the students … it’s really allowed folks to dig a little deeper.”
Yosef is a supporter of online education, not just for the conveniences it affords the instructor or student, but because it signifies the impact technology has on the educational paradigm:

“So it makes a significant difference, because we are online we are leveraging technologies to help facilitate learning. The more robust the technologies or the bundle or grouping of different technologies the more successful you’re going to be, just because the technology is helping you being able to bring people together and being able to express ideas … that gets us closer to that in person experience, but yet we can be many, many miles away where I've had students from all over the world, with many perspectives, bringing in different and unique insights, and really enriching the online experience for all of us, where we wouldn't have that experience without technology.”

**Emergent Themes – Category Identification**

Using temporal references within the transcripts to associate specific actions to the phases of course delivery, the analysis revealed the following sequence of activities undertaken by Yosef during the term. The actions in Table 33 are displayed in order of frequency mentioned, indicating the level of importance to Yosef.

The primary actions associated with each of the phases are described as follows:

- **Course Preparation: Develop Instructional Plan** – The consideration of course learning objectives, activities that assists in student achievement, identification of resources and discussion questions that motivate students and generate interest in the topics; the creation of a weekly plan which is referred to and executed to ensure learning objectives are attained.

- **Preview Period: Form Authentic Relationships** – The development of authentic relationships with students, connecting on areas of personal interests related to the course or professional goals, creating a foundation of trust in the instructor and a basis for open communication.
• First Week of Class: Initiate Interactions – The proactive engagement of students through communications of various forms (e.g., email, postings) which inspire student response and involvement in the course activities.

• First Week / Remaining Weeks: Set / Reinforce Expectations: Setting clear expectations of rigor and performance commensurate with course level and degree program in student friendly language, providing these in written and verbal form, and reinforcing them in practice through clear instructions, examples, and formative feedback.

Table 33

**Yosef: Actions Establishing Teaching Presence (Temporal Context)**

<table>
<thead>
<tr>
<th>Course Preparation</th>
<th>Preview Period</th>
<th>First Week</th>
<th>Remaining Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Instruction Plan</td>
<td>Form Authentic</td>
<td>Initiate Interactions</td>
<td>Reinforce</td>
</tr>
<tr>
<td></td>
<td>Relationships</td>
<td></td>
<td>Expectations</td>
</tr>
<tr>
<td>Content Review</td>
<td>Build Rapport</td>
<td>Set Expectations</td>
<td>Shared Responsibility for Learning</td>
</tr>
<tr>
<td>Supplement Course Materials</td>
<td>Available for Support / Assistance</td>
<td>Build Rapport</td>
<td>Provide Feedback</td>
</tr>
<tr>
<td>Topic Familiarization</td>
<td>Set Expectations</td>
<td>Available for Support / Assistance</td>
<td>Facilitate Discourse</td>
</tr>
<tr>
<td>Check Course Schedules</td>
<td>Initiate Interactions</td>
<td>Shared Learning</td>
<td>Respond to Inquiries</td>
</tr>
<tr>
<td>Send / Post Welcome Letter</td>
<td>Reduce Obstacles to Access</td>
<td></td>
<td>Post Announcements</td>
</tr>
<tr>
<td>Communicate Clearly and Frequently</td>
<td>Respond to Inquiries</td>
<td>Available for Support/ Assistance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supplement Course Materials</td>
<td>Follow-up with Non-Participants</td>
<td></td>
</tr>
</tbody>
</table>

A visual representation was constructed to provide the reader a contextualized understanding of the activities being described by the instructor. Using numeration techniques, actions with respect to establishing teaching presence were refined and the
most frequently mentioned actions in each phase of the course delivery were identified thematically to simplify the understanding of the case. This visual representation of the themes generated from the temporal analysis of the actions identified by Yosef is depicted in Figure 21, with the primary action for each phase depicted in shaded boxes.

Figure 21. Yosef: Contextual representation of primary actions when establishing teaching presence.

To gain greater insight into Yosef’s actions related to establishing his teaching presence, groupings of common themes generated from the analysis of the transcripts were made using the process of subsumption. Themes associated with these practices were not linked to the timeline of the course, but rather associated with the overall description of the purpose of the activities carried out by the instructor. To gain an understanding of the relationships between and among the themes and identify primary actions associated with establishing presence, a cluster analysis for word similarity within
the themes was performed using the Nvivo software. Using numeration techniques, the themes were ranked based on the frequency they appeared in the interviews indicating the level of importance to Yosef, as displayed in Table 34. The Pearson correlation coefficient reflecting the relationship of the theme to teaching presence is also displayed in Table 34.

Table 34

*Yosef: Practices Associated with Establishing Teaching Presence*

<table>
<thead>
<tr>
<th>Practices Associated with Establishing Teaching Presence</th>
<th>Weighting Based on % References</th>
<th>Pearson’s Coefficient (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate Clearly and Frequently</td>
<td>14.08</td>
<td>0.919</td>
</tr>
<tr>
<td>Form Authentic Relationships</td>
<td>11.27</td>
<td>0.911</td>
</tr>
<tr>
<td>Serve as a Resource to Students</td>
<td>9.86</td>
<td>0.906</td>
</tr>
<tr>
<td>Include Students in Teaching Opportunities</td>
<td>9.86</td>
<td>0.732</td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>8.45</td>
<td>0.917</td>
</tr>
<tr>
<td>Provide Guidance</td>
<td>8.45</td>
<td>0.760</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>8.45</td>
<td>0.710</td>
</tr>
<tr>
<td>Set or Reinforce Expectations</td>
<td>8.45</td>
<td>0.659</td>
</tr>
<tr>
<td>Build Rapport</td>
<td>5.63</td>
<td>0.706</td>
</tr>
<tr>
<td>Reduce Obstacles to Access or Responsiveness</td>
<td>5.63</td>
<td>0.730</td>
</tr>
<tr>
<td>Acknowledge Student Contributions</td>
<td>4.23</td>
<td>0.459</td>
</tr>
<tr>
<td>Develop Instructional Plan</td>
<td>2.82</td>
<td>0.709</td>
</tr>
<tr>
<td>Provide Substantive and Constructive Feedback</td>
<td>2.82</td>
<td>0.159</td>
</tr>
</tbody>
</table>

The Pearson correlation coefficient generated from the analysis was also used as an indicator of influence to determine the relationships among the themes. A visual representation of these relationships is displayed in Figure 22. Themes most highly correlated with establishing teaching presence were identified as primary themes and are depicted in shaded boxes.
Further analysis of the interview transcripts revealed that Yosef’s actions taken in establishing his presence could be aligned to three underlying intentions: (a) to be a resource to share experiences and knowledge, (b) to promote an inclusive and collaborative shared responsibility for the learning environment, and (c) to set and reinforce expectations of performance as a partner in the learning experience. To understand how his actions supported and fulfilled these intentions, a cluster analysis based on word similarity within the themes was performed to identify relationships between the actions taken in establishing presence and the three identified intentions. Figure 23 provides a visual representation of the results. Only those actions showing a coefficient value of .70 or greater are depicted in the representation, to provide greater clarity in understanding the primary actions associated with fulfilling Yosef’s intentions.
Using the Pearson correlation coefficient generated from the analysis as a measure of the relationship between the actions and the intentions, it was determined that overall Yosef’s actions in establishing presence most greatly supported his intention of being a resource to his students ($r=0.913$). What emerged from this analysis was the identification of four key actions involved in fulfilling all three intentions: forming authentic relationships with students, communicating clearly and frequently, being available for support and assistance, and being a resource to share knowledge and experience. These actions are defined as:

- Form Authentic Relationships – The development of authentic relationships with students, connecting on areas of personal interests related to the course or professional goals, creating a foundation of trust in the instructor and a basis for open communication.
• Communicate Clearly and Frequently – Establish regular process of informing or updating students in clearly understood language, without jargon or overcomplicated instructions, via predetermined methods (announcements, emails); respond to inquiries and requests within agreed to timelines.

• Available for Support / Assistance – Send a consistent message that the role of the instructor is to support the academic goals of the students and that the instructor is accessible and available to do so.

• Serve as a Resource to Students – Ability to articulate and share mastery of topic knowledge and/or skills or have ability to direct students to resources that will enhance in-depth exploration of topic; ability to guide students through scholarly process of exploration.

As a result of these actions, Yosef builds a cohesive learning community with his students, whereby students are actively engaged and share in the responsibility of contributing to the learning experience of their peers at a level that is in keeping with the standards he sets. Further examination of the transcripts yielded themes associated with actions taken in setting the academic climate and inspiring intellectual curiosity. Table 35 provides a list of the primary actions identified by Yosef with respect to setting the academic climate in his classroom and those he felt helped inspire intellectual curiosity among his students. These actions are listed in the order of frequency mentioned by Yosef, indicating the order of importance to him.
Figure 24 provides a visual representation of the themes and relationships that emerged during the exploration of the actions related to setting academic climate and inspiring intellectual curiosity. Of the actions described by Yosef, being available to support or assist students and supplementing course materials emerged as the primary actions associated with establishing an academic climate in the course room. Yosef’s promotion of the shared responsibility in learning emerged as the primary action influencing the intellectual curiosity in his courses.
Of the actions described by Yosef, two actions were common to both academic functions: supplementing course materials and sharing the responsibility for learning. These actions help enhance the learning environment by providing relevant or current materials and bolster confidence as the student develops as a self-directed learner in a collaborative learning community. These actions are defined as follows:

- **Available for Support / Assistance** – Send a consistent message that the role of the instructor is to support the academic goals of the students and that the instructor is accessible and available to do so.

- **Supplement Course Material** – Provide supplemental materials, such as articles, or videos, extending the course beyond the textbook and the course room, personalizing it for the instructor and tailoring it to student interests; incorporation of supplemental materials to support current themes in the discipline or provide examples of relevancy to students.

- **Promote Shared Responsibility for Learning** – Provide students an active role and responsibility in the teaching and learning process with an active voice in the topics covered in the course or path of learning, inspiring collaborative contribution, personal accountability, and engagement in learning community; instructor provides guidance where needed.

**Collective Case Results**

The final stage of analysis in a collective case is to look for patterns of themes across cases. The approach of analysis suggested in the IPA method is to align the themes of each case in a tabular fashion to visually identify recurrent or major themes.
across cases (Smith, et al., 2009). Using this approach to analysis, a theme was required to have been present in the results of more than half of the cases, or four out of the six subject cases, in order to be considered recurrent.

The researcher utilized the data collected from the six subject cases for the analysis of the collective case. Following the same reporting format as used in the individual cases, this analysis provides a view of the collective case as a singular entity, rather than a compilation of individual reports.

Collective Profile

An attempt was made to construct a generic profile of the successful instructor based on the information gathered on the individual subjects, identifying commonalities among the individual participants that characterize what is required for success in the online environment. Due to the fact that the research site only offered graduate degrees, for accreditation compliance all participants were required to hold a doctoral degree, either a PhD, DSc, or other professional doctorate (e.g., JD, DBA) prior to joining the faculty.

During the interviews data were collected on the following:

- Program Type: Participants were asked to describe the type of educational programs they completed while earning their degrees with responses recorded as campus-based (CB), campus-based adult-focused or evening (CBA), hybrid or face-face with online components (HYB), completely online (OL), or mixed (combination indicated).
- **Student Experience**: Participants were asked to describe their educational experience as a student while earning their degrees with responses recorded as face-to-face (F2F), hybrid (HYB), online (OL), or mixed (combination indicated).

- **Prior Online Education Experience**: Participants were asked to describe their educational experience in the online environment prior to joining the research site with responses recorded as none, student, teacher, or mixed (student and teacher).

- **Prior Teaching Experience**: Participants were asked to describe their teaching experience prior to joining the research site with responses recorded as face-to-face (F2F), hybrid (HYB), online (OL), or mixed (combination indicated).

- **Prior Student Type**: Participants were asked to describe the type of students they taught prior to joining the research site with responses recorded as undergraduate (UND), graduate (GRAD), professional (PROF), or mixed (combination indicated).

- **Online Instructor Training**: Participants were asked to describe training they received while becoming an online instructor with responses recorded as technology-based (TB), on-the-job (OJT), or online-centric which included both technical and pedagogical components (OLC).

The individual responses concerning these profile characteristics of the subject cases are summarized in Table 36.
Using the tabulation method to determine recurrent themes among the data collected about the participants, the following characteristics were identified as commonalities for the collective case, as displayed in Table 37:

- **Campus-Based Program**: All participants had experienced campus-based programs as part of their educational profile.
- **Student Experience**: All participants had experienced face-to-face instruction as part of the educational profile.
- **Prior Online Experience**: Four of the six participants had experienced online education as a student prior to teaching at the research site.
- **Prior Teaching Experience**: All participants had experience in teaching in face-to-face environments prior to teaching online.
• Student Type: Five of the participants had experience teaching undergraduate students prior to teaching at the research site. Four of the participants had experience teaching graduate students prior to teaching at the research site.

Table 37

Collective Case: Recurrent Themes in Instructor Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Davina</th>
<th>Dominik</th>
<th>Karissa</th>
<th>Leighton</th>
<th>Pavia</th>
<th>Yosef</th>
<th>Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Type:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campus-Based (CB)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Campus Evening Adult (CBA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>No (3)</td>
</tr>
<tr>
<td>Hybrid (HYB)</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>No (2)</td>
</tr>
<tr>
<td>Online (OL)</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>No (3)</td>
</tr>
<tr>
<td><strong>Student Experience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face-to-Face (F2F)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Hybrid (HYB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>No (2)</td>
</tr>
<tr>
<td>Online (OL)</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>No (3)</td>
</tr>
<tr>
<td><strong>OL Experience Prior to Teaching at Research Site</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>No (3)</td>
</tr>
<tr>
<td>None</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No (2)</td>
</tr>
<tr>
<td><strong>Prior Teaching Experience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face-to-Face (F2F)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Hybrid (HYB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>No (1)</td>
</tr>
<tr>
<td>Online (OL)</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>No (3)</td>
</tr>
<tr>
<td><strong>Student Type</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate (UND)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Graduate (GRAD)</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Professional (PROF)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
<td>No (2)</td>
</tr>
<tr>
<td><strong>Online Instructor Training</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology Based</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>On-the-Job (OJT)</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>No (3)</td>
</tr>
<tr>
<td>Online-Centric (OLC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>No (1)</td>
</tr>
</tbody>
</table>

These results provide a general profile of the collective case as a person with the following characteristics: holds an advanced degree; has experience with online
education as a student; has previous teaching experience in a face-to-face academic environment; has taught students at both undergraduate and graduate levels. With respect to the type of training the participants received when learning to become an online instructor, it was found that five of the six participants received training that was technology-based, and that pedagogical skills were not obtained through any formalized training.

As part of the selection criteria, student evaluations were used to determine qualifications as a member of the study. During selection, each participant was evaluated on an individual basis. However, in order to draw inferences related to the collective case, their performance in these student evaluations were examined for commonalities, as displayed in Table 38.

<table>
<thead>
<tr>
<th>Original Selection Criteria</th>
<th>Contribution to Learning</th>
<th>Course Interaction</th>
<th>Teaching Practices</th>
<th>Student Centered Approach</th>
<th>Effectiveness Overall</th>
<th>Average Performance Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Average</td>
<td>3.43</td>
<td>3.44</td>
<td>3.56</td>
<td>3.60</td>
<td>3.51</td>
<td>3.53</td>
</tr>
<tr>
<td>Dominik</td>
<td>3.52</td>
<td>3.53</td>
<td>3.63</td>
<td>3.75</td>
<td>3.53</td>
<td>3.61</td>
</tr>
<tr>
<td>Leighton</td>
<td>3.59</td>
<td>3.65</td>
<td>3.64</td>
<td>3.74</td>
<td>3.66</td>
<td>3.67</td>
</tr>
<tr>
<td>Yosef</td>
<td>3.33</td>
<td>3.57</td>
<td>3.61</td>
<td>3.70</td>
<td>3.57</td>
<td>3.61</td>
</tr>
<tr>
<td>Pavia</td>
<td>3.66</td>
<td>3.48</td>
<td>3.64</td>
<td>3.63</td>
<td>3.53</td>
<td>3.57</td>
</tr>
<tr>
<td>Karissa</td>
<td>3.58</td>
<td>3.49</td>
<td>3.83</td>
<td>3.89</td>
<td>3.86</td>
<td>3.77</td>
</tr>
<tr>
<td>Davina</td>
<td>3.69</td>
<td>3.90</td>
<td>3.87</td>
<td>3.86</td>
<td>3.93</td>
<td>3.89</td>
</tr>
<tr>
<td>Collective Average</td>
<td>3.56</td>
<td>3.60</td>
<td>3.70</td>
<td>3.76</td>
<td>3.68</td>
<td>3.69</td>
</tr>
<tr>
<td>Difference</td>
<td>+.04</td>
<td>+.16</td>
<td>+.14</td>
<td>+.16</td>
<td>+.17</td>
<td>+.16</td>
</tr>
<tr>
<td>% Difference</td>
<td>1.17%</td>
<td>4.65%</td>
<td>3.93%</td>
<td>4.44%</td>
<td>4.84%</td>
<td>4.53%</td>
</tr>
</tbody>
</table>

Revised Selection Criteria
Based on the collective average of the participants, the characteristics of Student-Centered Approach and Teaching Practices were among the most highly regarded by the students in terms of scores. Closer examination of the data revealed that the greatest differences in scores from the peer average occurs in students’ evaluation of Overall Effectiveness (4.84% difference) and Course Interaction (4.65% difference).

*Patterns in Narrative Themes*

While each of the participants’ personal accounts are highly individual, there were themes in responses that were identified from the narrative summaries. To support the determination of whether a consistent meaning of teaching presence was shared by the participants, descriptors were used in interpreting their responses related to what teaching presence meant to them. These themes are displayed in Table 39.

As shown in Table 39, a single recurrent theme was expressed in the participants’ perception of what teaching presence meant to them: the articulation of teaching presence in the terms of responsiveness to students’ needs and expectations. This suggests a high degree of student-centeredness in the instructors, recognizing the supportive nature of the role in which they serve.

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Davina</th>
<th>Dominik</th>
<th>Karissa</th>
<th>Leighton</th>
<th>Pavia</th>
<th>Yosef</th>
<th>Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsiveness to Student Needs and Expectations</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
<td></td>
</tr>
<tr>
<td>Availability to support and guide</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td>No (3)</td>
<td></td>
</tr>
<tr>
<td>Engagement with students</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>No (3)</td>
<td></td>
</tr>
</tbody>
</table>
A common activity in all online instruction is the instructor’s engagement of students in the discussion forums by posting responses and facilitating the interaction among students. Typically, an instructor will review what has been posted by a student and attempt to build upon that by commenting back to the student or asking a question. Across the interviews, the researcher recognized a different tone from instructors while describing this activity when establishing presence whereby the instructors conveyed a common belief that they had to proactively initiate the interaction with students, possibly before the student even logged in for the first time. This outreach to students extended beyond a welcome email and struck the researcher as a differentiation in mindset as well as action from common practices.

The researcher also noticed a difference in the way the instructors described their interaction with students in the forums. Most described it as more than “posting to forums” indicating a desire to help students gain new perspectives on the topic or elevate their investment in the discussion. There was a level of humility expressed in the recognition that the students could often have greater knowledge on specific topics, and they deferred to that experience, and felt they learned from their students in each course they taught.

Although this study focused on the actions related to establishing teaching presence, which predominantly focused on the actions taken at the beginning of a course, there were commonalities that were conveyed about the remaining weeks as well. In particular in the description of maintaining a presence in forums. Most acknowledged that their high level of presence at the beginning of a course created a momentum in the discussions; however, when they recognized that students took responsibility and were
engaging with each other, they stepped back from the participation and focused on providing feedback on assignments but keeping a watchful eye on participation and being ready to jump back in if interaction decreased significantly. However, when they did participate in forums they described a higher level of interaction, considered in the view of the researcher to be facilitating discourse, with the intent of challenging or advancing their students’ participation beyond mere posts. Most expressed a sense of pride in that their students took ownership in the forums.

Other themes associated with the narratives of the participants were examined through the pattern identification across cases discussed in the following section.

_Emergent Themes – Pattern Identification across Cases_

Using temporal references to associate specific actions to the phases of course delivery, the collective case analysis revealed the similarities and differences among the individual activities undertaken by the six subjects when establishing teaching presence. Using the tabulation method of identifying patterns across cases, these actions are identified in Table 40. The final column in the table indicates those actions that were identified as recurrent using the criterion of a minimum of four occurrences across cases.
Table 40

Collective Case: Recurrent Themes in Establishing Teaching Presence (Temporal Context)

<table>
<thead>
<tr>
<th>Actions in Preparation for Course</th>
<th>Davina</th>
<th>Dominik</th>
<th>Karissa</th>
<th>Leighton</th>
<th>Pavia</th>
<th>Yosef</th>
<th>Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Review</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Develop Instructional Plan</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Topic Familiarization</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Supplement Course Material</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Check Course Schedules</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Check Technology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Prepare / Post Announcements</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No (3)</td>
</tr>
<tr>
<td>Prepare Welcome Letter</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Check Rosters</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Actions in Preview Period</th>
<th>Davina</th>
<th>Dominik</th>
<th>Karissa</th>
<th>Leighton</th>
<th>Pavia</th>
<th>Yosef</th>
<th>Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form Authentic Relationships</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Send/Post Welcome Letter</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Note Attendance and Participation</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Post Announcements</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Build Rapport</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Set Expectations</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No (3)</td>
</tr>
<tr>
<td>Reduce Obstacles to Access</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No (1)</td>
</tr>
<tr>
<td>Respond to Inquiries</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No (1)</td>
</tr>
<tr>
<td>Check Roster</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No (1)</td>
</tr>
<tr>
<td>Communicate Clearly &amp; Frequently</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No (1)</td>
</tr>
</tbody>
</table>
Table 40 (continued)

*Collective Case: Recurrent Themes in Establishing Teaching Presence (Temporal Context)*

<table>
<thead>
<tr>
<th>Actions During First Week</th>
<th>Davina</th>
<th>Dominik</th>
<th>Karissa</th>
<th>Leighton</th>
<th>Pavia</th>
<th>Yosef</th>
<th>Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available for Support / Assistance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Set Expectations</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Build Rapport</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Shared Responsibility for Learning</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Note Attendance and Participation</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Follow up with Non-Participants</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No (3)</td>
</tr>
<tr>
<td>Respond to Inquiries</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No (2)</td>
</tr>
<tr>
<td>Reduce Obstacles to Access</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (2)</td>
</tr>
<tr>
<td>Build Authentic Relationships</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No (2)</td>
</tr>
<tr>
<td>Communicate Clearly &amp; Frequently</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No (2)</td>
</tr>
<tr>
<td>Post Announcements</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (1)</td>
</tr>
<tr>
<td>Form Authentic Relationships</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No (1)</td>
</tr>
<tr>
<td>Supplement Course Materials</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No (1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Actions in Remaining Weeks</th>
<th>Davina</th>
<th>Dominik</th>
<th>Karissa</th>
<th>Leighton</th>
<th>Pavia</th>
<th>Yosef</th>
<th>Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available for Support / Assistance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Facilitate Discourse</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Provide Substantive and Constructive Feedback</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Reinforce Expectations</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Post Announcements</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Shared Responsibility for Learning</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Respond to Inquiries</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No (3)</td>
</tr>
<tr>
<td>Follow up with Non-Participants</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No (3)</td>
</tr>
<tr>
<td>Supplement Course Materials</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No (1)</td>
</tr>
</tbody>
</table>
Recurrent themes identified as common among all subject cases were:

- During the period of course preparation, common actions taken by all participants included conducting thorough content reviews and developing instructional plans.

- During the preview period, common actions taken by all participants included sending or posting a welcome message and establishing a foundation to forming authentic relationships with their students.

- During the first week of class, common actions taken by all participants included initiating interactions with students and being available for support and assistance.

- During the remainder of the term, common actions taken by all participants included: remaining available for support and assistance, facilitating discourse in the discussion forums, providing substantive and constructive feedback on assignments and performance, and reinforcing expectations for student performance.

For the collective case, the primary recurrent themes associated with each of the temporal phases of a course are described as follows:

- Course Preparation: Content Review – A thorough review of the course content, checking it for accuracy, currency and relevancy, ensuring that the learning environment is ready for students; ensuring familiarization with content and sequence of materials.
• Course Preparation: Develop Instructional Plan – The consideration of course learning objectives, activities that assists in student achievement, identification of resources and discussion questions that motivate students and generate interest in the topics; the creation of a weekly plan which is referred to and executed to ensure learning objectives are attained.

• Preview Period: Form Authentic Relationships – The development of authentic relationships with students, connecting on areas of personal interests related to the course or professional goals, creating a foundation of trust in the instructor and a basis for open communication.

• Preview Period: Send / Post Welcome Letter – The preparation and distribution of a welcome email or announcement that contains personal introduction of instructor, a synopsis of the course, objectives, reminders of dates, requirements for participation, and a “starter list” of activities for students to complete. This may include reposting portions of the welcome as separate announcements or reminders in the course shell.

• First Week of Class: Initiate Interactions – The proactive engagement of students through communications of various forms (e.g., email, postings) which inspire student response and involvement in the course activities.

• First Week of Class / Remaining Weeks: Available for Support / Assistance – Send a consistent message that the role of the instructor is to support the academic goals of the students and that the instructor is accessible and available to do so.
• Remaining Weeks: Provide Substantive and Constructive Feedback – Provide feedback to students that stimulates thinking, challenges them to view their responses through a different perspective, or provide a path that offers deeper insight into a topic area.

• Remaining Weeks: Facilitate Discourse – Engage in discussions in ways that encourage student contributions and involvement, acknowledging student contributions by both constructively building upon or synthesizing the contributions of others as well as seeking original input and thoughtful response; asking probing questions that develop critical thinking skills, encouraging further interactions; noticing when someone is not participating and inviting them to engage in the dialogue.

• Remaining Weeks: Set / Reinforce Expectations: Setting clear expectations of rigor and performance commensurate with course level and degree program in student friendly language, providing these in written and verbal form, and reinforcing them in practice through clear instructions, examples, and formative feedback.

A visual representation was constructed to provide a contextualized understanding of the themes identified as recurrent during this analysis. Figure 25 provides this representation, using the activity’s number of case occurrences as a basis for weighting its importance. In order to simplify the understanding of the collective case, using the information presented in Table 40, a visual representation of the collective case was constructed using only actions identified as recurrent in all subject cases.
Figure 25. Collective Case: Contextual representation of primary actions when establishing teaching presence.

To gain greater insight into actions related to establishing teaching presence without the temporal lens applied, practices were identified through groupings of common themes associated with the overall description of the purpose of the activities carried out by the instructor using the process of subsumption. Using the tabulation method prescribed by the IPA method, 15 practices were identified as both recurrent and representative of the collective case and are displayed in Table 41.
Table 41

Collective Case: Recurrent Themes in Establishing Teaching Presence

<table>
<thead>
<tr>
<th>Actions</th>
<th>Davina</th>
<th>Dominik</th>
<th>Karissa</th>
<th>Leighton</th>
<th>Pavia</th>
<th>Yosef</th>
<th>Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available for Support / Assistance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Form Authentic Relationships</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Build Rapport</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Communicate Clearly &amp; Frequently</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Develop Instructional Plan</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Provide Guidance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Provide Substantive and Constructive Feedback</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Set/Reinforce Expectations</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Include Students in Teaching Opportunities</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Send/Post Welcome Letter</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Acknowledge Student Contributions</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Follow-up with Non-Participants</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Humanize Course</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Note Attendance &amp; Participation</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td></td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Be Resource</td>
<td></td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>No (3)</td>
</tr>
<tr>
<td>Reduce Obstacles to Access</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>No (2)</td>
</tr>
</tbody>
</table>
Of these practices, nine were identified by all participants as actions related to establishing their presence in the classroom:

- **Available for Support / Assistance** – Send a consistent message that the role of the instructor is to support the academic goals of the students and that the instructor is accessible and available to do so.

- **Form Authentic Relationships** – The development of authentic relationships with students, connecting on areas of personal interests related to the course or professional goals, creating a foundation of trust in the instructor and a basis for open communication.

- **Build Rapport** – Establish and develop a collegial or peer-level relationship with students based on common interests, experiences, or understandings that builds trust and enhances communications.

- **Communicate Clearly and Frequently** – Establish regular process of informing or updating students in clearly understood language, without jargon or overcomplicated instructions, via predetermined methods (announcements, emails); respond to inquiries and requests within agreed to timelines.

- **Develop Instructional Plan** – The consideration of course learning objectives, activities that assists in student achievement, identification of resources and discussion questions that motivate students and generate interest in the topics; the creation of a weekly plan which is referred to and executed to ensure learning objectives are attained.
• Initiate Interactions – The proactive engagement of students through communications of various forms (e.g., email, postings) which inspire student response and involvement in the course activities.

• Provide Guidance – Serve as an accessible resource for information and substantive feedback, cognizant of needs for timely responses and formative direction to ensure understanding of course concepts and requirements.

• Provide Substantive and Constructive Feedback – Provide feedback to students that stimulates thinking, challenges them to view their responses through a different perspective, or provide a path that offers deeper insight into a topic area.

• Set / Reinforce Expectations: Setting clear expectations of rigor and performance commensurate with course level and degree program in student friendly language, providing these in written and verbal form, and reinforcing them in practice through clear instructions, examples, and formative feedback.

The tabulation method utilized, however, did not provide insight into the relationship of the themes with respect to establishing presence, since each were weighted equally when presented in a subject case during the analysis. In order to gain an understanding of preferences for the practices, all subject case data were merged into a single case for evaluation purposes. The merging of case data is supported by Stake (2006) in a collective case study when the concern for situationality is reduced. By merging data from the six subject cases, the researcher was able to replicate the cluster analysis for word similarity performed on the individual subject cases, providing a parallel evaluation of the themes and their relationship with establishing teaching
presence. Using numeration techniques, the themes were then weighted based on the frequency they appeared in the collective case, indicating the level of overall importance to the participants. These results, based on the frequency of references, are displayed in Table 42 and indicate preferences for forming authentic relationships with students, being available for support and assistance, providing guidance, and building rapport as the top four actions used in establishing presence. The Pearson correlation coefficient reflecting the relationship of the theme to teaching presence is also displayed in Table 42.

Table 42

*Collective Case: Recurrent Themes Related to Establishing Teaching Presence*

<table>
<thead>
<tr>
<th>Practices Associated with Establishing Teaching Presence</th>
<th>Weighting Based on % References</th>
<th>Pearson’s Coefficient (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form Authentic Relationships</td>
<td>10.89</td>
<td>0.919</td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>10.51</td>
<td>0.915</td>
</tr>
<tr>
<td>Provide Guidance</td>
<td>9.34</td>
<td>0.907</td>
</tr>
<tr>
<td>Build Rapport</td>
<td>8.95</td>
<td>0.892</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>7.59</td>
<td>0.841</td>
</tr>
<tr>
<td>Set/Reinforce Expectations</td>
<td>7.39</td>
<td>0.909</td>
</tr>
<tr>
<td>Communicate Clearly &amp; Frequently</td>
<td>7.39</td>
<td>0.897</td>
</tr>
<tr>
<td>Provide Substantive and Constructive Feedback</td>
<td>5.25</td>
<td>0.684</td>
</tr>
<tr>
<td>Develop Instructional Plan</td>
<td>4.67</td>
<td>0.809</td>
</tr>
<tr>
<td>Include Students in Teaching Opportunities</td>
<td>4.67</td>
<td>0.739</td>
</tr>
<tr>
<td>Humanize Course</td>
<td>4.28</td>
<td>0.736</td>
</tr>
<tr>
<td>Note Attendance &amp; Participation</td>
<td>3.69</td>
<td>0.747</td>
</tr>
<tr>
<td>Send/Post Welcome Letter</td>
<td>2.72</td>
<td>0.705</td>
</tr>
<tr>
<td>Acknowledge Student Contributions</td>
<td>2.72</td>
<td>0.671</td>
</tr>
<tr>
<td>Follow-up with Non-Participants</td>
<td>2.14</td>
<td>0.534</td>
</tr>
</tbody>
</table>

The Pearson correlation coefficient generated from the analysis was also used as an indicator of influence to determine the relationships among the themes. A visual representation of these relationships is displayed in Figure 26. Themes most highly
correlated with establishing teaching presence were identified as primary themes and are depicted in shaded boxes.

Figure 26. Collective Case: Recurrent themes related to practices establishing teaching presence.

Using the Pearson correlation coefficient generated from the analysis, four actions were revealed to be most closely related to the overall activity of establishing presence, and were reflected as such in frequency of references within the interviews. These activities and the correlation coefficient generated from the analysis were:
- Form Authentic Relationships \((r=.919)\) – The development of authentic relationships with students, connecting on areas of personal interests related to the course or professional goals, creating a foundation of trust in the instructor and a basis for open communication.

- Available for Support / Assistance \((r=.915)\) – Send a consistent message that the role of the instructor is to support the academic goals of the students and that the instructor is accessible and available to do so.

- Set / Reinforce Expectations \((r=.909)\) – Setting clear expectations of rigor and performance commensurate with course level and degree program in student friendly language, providing these in written and verbal form, and reinforcing them in practice through clear instructions, examples, and formative feedback.

- Provide Guidance \((r=.907)\) – Serve as an accessible resource for information and substantive feedback, cognizant of needs for timely responses and formative direction to ensure understanding of course concepts and requirements.

The interviews provided insight with respect to the intentions of the instructors as they revealed the reasons behind the actions taken when establishing teaching presence. Using the tabulation method, Table 43 identifies the different intentions and motives of the instructors and those recurrent themes identified during the analysis. The analysis of the collective case revealed three primary intentions as recurrent themes underlying the actions of the instructors: (a) to ensure engagement and interaction that supported learning, (b) to connect with students in authentic ways, and (c) to serve as a resource to share experiences and knowledge that guides learning. These intentions relate to ensuring
that an active participation in the learning process occurred in the courses taught by the subjects, based on a recognition of the role the instructor serves while interacting with students in an authentic way.

Table 43

*Collective Case: Recurrent Themes in Instructor Intentions*

<table>
<thead>
<tr>
<th>Intentions Related to Actions</th>
<th>Davina</th>
<th>Dominik</th>
<th>Karissa</th>
<th>Leighton</th>
<th>Pavia</th>
<th>Yosef</th>
<th>Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure engagement and interaction that supported learning</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Connect with students in authentic ways</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Serve as a resource to share experiences and knowledge that guides learning</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Promote an inclusive and collaborative shared responsibility for learning environment</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>No (3)</td>
</tr>
<tr>
<td>Provide guidance and feedback that developed knowledge and critical thinking skills</td>
<td>Yes</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>No (2)</td>
</tr>
<tr>
<td>Set and reinforce expectations of performance as a partner in learning experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>No (1)</td>
</tr>
</tbody>
</table>

To understand which of the actions of instructors supported and fulfilled these intentions, a cluster analysis based on word similarity within the themes was performed with the merged data to identify relationships between the actions taken in establishing presence and the identified intentions. Figure 27 provides a visual representation of the results. Only those actions showing a coefficient value of .80 or greater are depicted in
the representation, to provide greater clarity in understanding the primary actions associated with fulfilling instructors’ intentions.

Using the Pearson correlation coefficient generated from the analysis as a measure of the relationship between the actions and the intentions, it was determined that overall instructors’ actions in establishing presence most greatly supported the intention of ensuring engagement and interaction that supported learning ($r=0.955$). As depicted in Figure 27, the identification of three key actions most greatly related to fulfilling all three intentions also emerged from this analysis: forming authentic relationships with students, building rapport, and setting and reinforcing expectations.
The expectation of involvement in the learning process suggested implications for setting the academic tone of courses and its influence on intellectual curiosity of students. As a result, further exploration of the collective case with respect to those practices identified as related to setting the academic tone of courses and inspiring intellectual curiosity of students was conducted. This was accomplished by using the tabulation method. Table 44 identifies the different practices associated with setting the academic climate and those recurrent themes identified during the analysis.

<table>
<thead>
<tr>
<th>Practices</th>
<th>Davina</th>
<th>Dominik</th>
<th>Karissa</th>
<th>Leighton</th>
<th>Pavia</th>
<th>Yosef</th>
<th>Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set / Reinforce Expectations</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Model Scholarly Behavior</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Promote Shared Responsibility for Learning</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Providing Substantive and Constructive Feedback</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Challenge Students</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No (3)</td>
</tr>
<tr>
<td>Supplement Course Materials</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>No (2)</td>
</tr>
<tr>
<td>Provide Individual Counseling</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No (2)</td>
</tr>
<tr>
<td>Identify Learning Goals</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td>No</td>
<td></td>
<td>No (2)</td>
</tr>
<tr>
<td>Respond to Inquiries</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
<td>No (1)</td>
</tr>
<tr>
<td>Understand Student Population</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
<td>No (1)</td>
</tr>
<tr>
<td>Ensuring Course Integrity</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No (1)</td>
</tr>
<tr>
<td>Inspire Personal Responsibility</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No (1)</td>
</tr>
</tbody>
</table>
The common actions taken in setting academic tone in the collective case were identified as:

- **Set / Reinforce Expectations**: Setting clear expectations of rigor and performance commensurate with course level and degree program in student friendly language, providing these in written and verbal form, and reinforcing them in practice through clear instructions, examples, and formative feedback.

- **Model Behavior** – The instructor establishes a prototype for thinking and classroom behavior through personal example, then encourages students to meet performance requirements while overseeing, guiding and directing students as they emulate or adapt instructor’s approach.

- **Available for Support / Assistance** – Send a consistent message that the role of the instructor is to support the academic goals of the students and that the instructor is accessible and available to do so.

- **Promote Shared Responsibility for Learning** – Provide students an active role and responsibility in the teaching and learning process with an active voice in the topics covered in the course or path of learning, inspiring collaborative contribution, personal accountability, and engagement in learning community; instructor provides guidance where needed.

- **Provide Substantive and Constructive Feedback** – Provide feedback to students that stimulates thinking, challenges them to view their responses through a different perspective, or provide a path that offers deeper insight into a topic area.
- Initiate Interactions – The proactive engagement of students through communications of various forms (e.g., email, postings) which inspire student response and involvement in the course activities.

Similarly, a tabulation of practices associated with inspiring intellectual curiosity revealed common actions for the collective case. Table 45 displays the practices associated with inspiring intellectual curiosity and those recurrent themes identified during the analysis.

Table 45

**Collective Case: Recurrent Themes in Inspiring Intellectual Curiosity**

<table>
<thead>
<tr>
<th>Practices</th>
<th>Davina</th>
<th>Dominik</th>
<th>Karissa</th>
<th>Leighton</th>
<th>Pavia</th>
<th>Yosef</th>
<th>Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Showing Active Interest / Passion for Course</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Identifying Relevance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Promote Shared Responsibility for Learning</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Listening and Asking Questions</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Acknowledge Student Contributions</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Supplement Course Materials</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Creatively Present Materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No (3)</td>
</tr>
<tr>
<td>Providing Substantive and Constructive Feedback</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No (2)</td>
</tr>
<tr>
<td>Sharing Responsibility for Learning</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No (1)</td>
</tr>
</tbody>
</table>
The recurrent actions associated with inspiring intellectual curiosity were:

- **Active Interest/Passion in the Course**: Exhibit an enthusiasm for teaching the course, relaying the message to students that the instructor enjoys the topic and has a genuine interest in sharing knowledge and experiences.

- **Identify Relevance to Student – Preparation of course content, activities, and assignments** acknowledging student perspective and interests, and tailoring course assignments to the needs and interests of the student.

- **Promote Shared Responsibility for Learning** – Provide students an active role and responsibility in the teaching and learning process with an active voice in the topics covered in the course or path of learning, inspiring collaborative contribution, personal accountability, and engagement in learning community; instructor provides guidance where needed.

- **Listen and Ask Questions** – The instructor encourages and builds cohesion within the group by asking questions, directing and guiding conversations to be inclusive, while also developing the capacity for independent action, initiative and responsibility of the individual student as a member of the learning community.

- **Acknowledge Student Contributions** – A proactive incorporation of student contributions (postings, presentations, etc.) in course activities which draws students into the course, capitalizes on collaboration, creates opportunities for student-led teaching, and acknowledges a shared agency in learning.
- Supplement Course Material – Provide supplemental materials, such as articles, or videos, extending the course beyond the textbook and the course room, personalizing it for the instructor and tailoring it to student interests; incorporation of supplemental materials to support current themes in the discipline or provide examples of relevancy to students.

Figure 28 provides a visual representation of these recurrent themes and relationships that emerged during this analysis of the actions related to setting academic climate and inspiring intellectual climate.

![Diagram of Recurrent Themes](image)

**Figure 28.** Collective Case: Recurrent themes related to setting intellectual climate.

Although a number of themes were associated with setting the academic climate, the primary recurrent theme that emerged from analysis of the merged results was setting and reinforcing expectations. The analysis relating to inspiring intellectual curiosity resulted in the identification of two primary recurring themes: showing an active interest
or passion for the course and identifying relevance of the course for students. The collaborative atmosphere created by promoting a shared responsibility in the learning process in the classroom had an influence on inspiring students’ intellectual curiosity in the topics of the courses. This action was a common action found in both academic functions and was demonstrated mostly through acknowledging students contributions.

**Establishing Validity of Results**

Stake (2006) suggested that by eliminating themes that did not occur in a predominance of the subject cases through a tabulation method such as the one suggested in the IPA method, results may simply reflect situational findings and may not necessarily reflect the weight or importance of the actions held by the collective subjects. A second method of pattern recognition across cases, suggested by Stake (2006), used the merged results of cases to identify predominant themes to provide quantitative assessment of implied importance based on the number of references and correlation coefficient values. This method was supported through the Nvivo software by importing the individual case results and producing a collective case for analysis.

The researcher wanted to confirm that the importance the instructors placed on the actions taken was reflected in the collective results. A cluster analysis for word similarity within the themes of each phase was performed with the Nvivo software using the merged data to identify the relationship of specific actions with establishing presence. The Pearson correlation coefficient generated from the cluster analysis revealed which actions were most closely related to the overall activity of establishing presence during the phase evaluated. The results of these two quantitative analyses were compared to the
results of the tabulation method supported by the IPA method used in the study. As can be seen in Table 46, which lists the actions for each phase in order of frequency of references, each of the recurrent themes represented a minimum of 5% of the total references. The correlation coefficient for the recurrent themes were generally greater than .50, with two exceptions, checking technology ($r=.298$) during course preparation and noting attendance and participation ($r=.394$) during the preview period.

To better understand the meaning of these results, the primary themes identified in the tabulation method, those occurring in all six subject cases, were extracted for comparison. It was found that each of the primary recurrent themes represented a minimum of 15% of the total references, with the exception of sending or posting the welcome letter, which occurred in 11.43% of the references. The correlation coefficient of all of the primary actions were greater than .50, with the majority exceeding .70. These results are displayed in Table 47.
<table>
<thead>
<tr>
<th>Actions</th>
<th>% References</th>
<th>Pearson’s Coefficient</th>
<th>IPA Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Actions in Preparation for Course</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop Instructional Plan</td>
<td>28.95</td>
<td>.889</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Course Content Review</td>
<td>21.05</td>
<td>.912</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Supplement Course Materials</td>
<td>11.84</td>
<td>.666</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Topic Familiarization</td>
<td>11.84</td>
<td>.708</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Check Course Schedules</td>
<td>7.89</td>
<td>.751</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Check Technology</td>
<td>5.26</td>
<td>.298</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Prepare Welcome Letter</td>
<td>5.26</td>
<td>.519</td>
<td>No (3)</td>
</tr>
<tr>
<td>Prepare Announcements</td>
<td>5.26</td>
<td>.631</td>
<td>No (2)</td>
</tr>
<tr>
<td>Check Rosters</td>
<td>2.63</td>
<td>.626</td>
<td>No (2)</td>
</tr>
<tr>
<td><strong>Actions in Preview Period</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form Authentic Relationships</td>
<td>32.86</td>
<td>.928</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Build Rapport</td>
<td>15.71</td>
<td>.715</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Send / Post Welcome Letter</td>
<td>11.43</td>
<td>.789</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Post Announcements</td>
<td>10.0</td>
<td>.729</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Available for Support</td>
<td>7.14</td>
<td>.509</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>7.14</td>
<td>.583</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Note Attendance and Participation</td>
<td>7.14</td>
<td>.394</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Reduce Obstacles to Access</td>
<td>2.86</td>
<td>.226</td>
<td>No (1)</td>
</tr>
<tr>
<td>Respond to Inquiries</td>
<td>2.86</td>
<td>.194</td>
<td>No (1)</td>
</tr>
<tr>
<td>Set Expectations</td>
<td>2.86</td>
<td>.624</td>
<td>No (3)</td>
</tr>
<tr>
<td><strong>Actions During First Week</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>21.49</td>
<td>.912</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>21.49</td>
<td>.916</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Set Expectations</td>
<td>14.05</td>
<td>.934</td>
<td>Yes (5)</td>
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<tr>
<td>Build Rapport</td>
<td>10.74</td>
<td>.782</td>
<td>Yes (5)</td>
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<tr>
<td>Shared Responsibility for Learning</td>
<td>9.09</td>
<td>.745</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Note Attendance and Participation</td>
<td>8.26</td>
<td>.691</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Reduce Obstacles to Access</td>
<td>4.96</td>
<td>.478</td>
<td>No (2)</td>
</tr>
<tr>
<td>Respond to Inquiries</td>
<td>4.13</td>
<td>.677</td>
<td>No (3)</td>
</tr>
<tr>
<td>Follow Up with Non-Participants</td>
<td>2.48</td>
<td>.481</td>
<td>No (3)</td>
</tr>
<tr>
<td>Post Announcements</td>
<td>1.65</td>
<td>.324</td>
<td>No (1)</td>
</tr>
<tr>
<td>Supplement Course Materials</td>
<td>1.65</td>
<td>.564</td>
<td>No (1)</td>
</tr>
<tr>
<td><strong>Actions in Remaining Weeks</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>19.23</td>
<td>.774</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Provide Substantive and Constructive Feedback</td>
<td>17.95</td>
<td>.656</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Reinforce Expectations</td>
<td>16.67</td>
<td>.800</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Facilitate Discourse</td>
<td>15.39</td>
<td>.571</td>
<td>Yes (6)</td>
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<tr>
<td>Shared Responsibility for Learning</td>
<td>8.97</td>
<td>.622</td>
<td>Yes (4)</td>
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<tr>
<td>Respond to Inquiries</td>
<td>8.97</td>
<td>.540</td>
<td>No (3)</td>
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<tr>
<td>Post Announcements</td>
<td>6.41</td>
<td>.569</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Follow up with Non-Participants</td>
<td>5.13</td>
<td>.251</td>
<td>No (3)</td>
</tr>
<tr>
<td>Supplement Course Materials</td>
<td>1.28</td>
<td>.176</td>
<td>No (1)</td>
</tr>
</tbody>
</table>
Table 47

Collective Case: Verification of Primary Recurrent Themes in Establishing Teaching Presence (Temporal Context)

<table>
<thead>
<tr>
<th>Actions</th>
<th>% References</th>
<th>Pearson’s Coefficient</th>
<th>IPA Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actions in Preparation for Course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Content Review</td>
<td>21.05</td>
<td>.912</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Develop Instruction Plan</td>
<td>28.95</td>
<td>.889</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Actions in Preview Period</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form Authentic Relationships</td>
<td>32.86</td>
<td>.928</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Send / Post Welcome Letter</td>
<td>11.43</td>
<td>.789</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Actions During First Week</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>21.49</td>
<td>.912</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>21.49</td>
<td>.916</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Actions in Remaining Weeks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available for Support / Assistance</td>
<td>19.23</td>
<td>.774</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Provide Substantive and Constructive Feedback</td>
<td>17.95</td>
<td>.656</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Reinforce Expectations</td>
<td>16.67</td>
<td>.800</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Facilitate Discourse</td>
<td>15.39</td>
<td>.571</td>
<td>Yes (6)</td>
</tr>
</tbody>
</table>

To evaluate and verify actions related to establishing teaching presence without the temporal lens applied, the practices in the merged data were identified through groupings of common themes using methods of subsumption. These practices were then ranked for frequency in references in the interviews and analyzed for identification of relationships of the specific themes with establishing teaching presence through a cluster analysis for word similarity performed using the Nvivo software. The results of these two quantitative analyses were compared to the results of the tabulation method supported by the IPA method used in the study. As can be seen in Table 48, which lists the actions for establishing teaching presence in order of frequency of references, each of the primary recurrent themes represented a minimum of 5% of the total references, with the exception of developing an instructional plan (4.67%). The correlation coefficients for the recurrent themes were all greater than .80, with the exception of providing substantive and
constructive feedback \((r=.684)\). This was not an unexpected result as feedback occurs later in the course and is more closely related to maintaining teaching presence than establishing it.

Table 48

*Collective Case: Verification of Primary Recurrent Themes in Establishing Teaching Presence*

<table>
<thead>
<tr>
<th>Actions</th>
<th>% References</th>
<th>Pearson’s Coefficient</th>
<th>IPA Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form Authentic Relationships</td>
<td>10.89</td>
<td>.919</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Available for Support</td>
<td>10.51</td>
<td>.915</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Provide Guidance</td>
<td>9.34</td>
<td>.907</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Build Rapport</td>
<td>8.95</td>
<td>.892</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Initiate Interactions</td>
<td>7.59</td>
<td>.841</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Set and Reinforce Expectations</td>
<td>7.39</td>
<td>.909</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Communicate Clearly and Frequently</td>
<td>7.39</td>
<td>.897</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Provide Substantive and Constructive Feedback</td>
<td>5.25</td>
<td>.684</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Develop Instructional Plan</td>
<td>4.67</td>
<td>.809</td>
<td>Yes (6)</td>
</tr>
<tr>
<td>Include Students in Teaching</td>
<td>4.67</td>
<td>.739</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Humanize Course</td>
<td>4.28</td>
<td>.736</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Note Attendance and Participation</td>
<td>3.69</td>
<td>.747</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Send / Post Welcome Letter</td>
<td>2.72</td>
<td>.705</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Acknowledge Student Contributions</td>
<td>2.72</td>
<td>.671</td>
<td>Yes (4)</td>
</tr>
<tr>
<td>Follow-up with Non-Participants</td>
<td>2.14</td>
<td>.534</td>
<td>Yes (4)</td>
</tr>
</tbody>
</table>

The results of these quantitative analyses provide consistent results with the primary themes identified through the tabulation method, essentially verifying that the results determined for the collective case reflected the collective voice of the subject cases and not situational findings.
Discussion of Findings

Findings Related to Instructor Profile

The profile characteristics examined in the collective case did not yield any conclusive findings about what would be considered a generic profile of a successful online instructor. However, the analysis of the collective case provided an opportunity to determine if any commonalities might explain the approaches used in establishing teaching presence. In looking for commonalities among the participants, the results showed a diversity in backgrounds and experiences, with five characteristics shown as recurrent among the collective case.

The commonality of the educational background in campus-based, face-to-face academic programs was an expected characteristic to be shared by participants, due to their age and years of experience in teaching. This commonality is not viewed as having an impact on establishing presence in the online environment.

A recurrent theme identified was the experience as an online student prior to teaching at the research site. It is posited that this experience has an influence on the subjects’ orientation towards the students in their course, providing them insight into the challenges and needs of online students. Having been a student in an online environment engendered a more student-centered perspective among the instructors.

Another commonality found was in the teaching experience prior to joining the research site. Although the teaching experience was varied across subject cases, all participants had some form of traditional classroom teaching experience from which they could draw upon while learning to become an online instructor. It is possible that prior classroom teaching experience may be a characteristic that enabled an instructor to enact
strategies that are more successful than their counterparts, when faced with the challenges of teaching in an online course. Understanding the role of a teacher in a traditional classroom setting, may have provided the participants with a basis from which they could make adjustments in their teaching practices as needed to respond to student situations, influencing their success during on-the-job training.

A recurrent theme identified in the analysis was in the type of training provided to participants while learning to become online instructors. Five out of the six participants received primarily technical training as a form of preparation for teaching, indicating pedagogical training was primarily obtained through experiences on the job (OJT). As indicated above, OJT may have been enhanced by prior teaching experiences. This finding identifies a potential weakness in institutional support of online instructors, whereby pedagogical training is not widely provided for online instructors. The lack of pedagogical training that was revealed in the collective case, has implications related to faculty development programs for online instructors and their need to address the development of effective practices as much as the technological skills (March & Lee, 2016; Meyer & Murrell, 2014).

The student evaluations for the collective case demonstrated the value students placed on the student-centered approach and teaching practices that were utilized in the online classrooms. However, closer examination of the data revealed the greatest difference in performance between the collective case and the average performance of peers was in overall effectiveness and course interaction. Given that overall effectiveness was not defined in the surveys and left to the interpretation of the student respondent, the result associated with course interaction is more meaningful when considering
pedagogical implications of teaching presence. In analyzing these data, it was noticed that the two instructors who had no online experience, either as a student or teacher, prior to joining the research site, scored among the lowest of the participants in Course Interaction. This suggests that some online experience, primarily as a student as was indicated in the results, may provide online instructors with the sensitivity to the needs of students as related to interacting with their instructor.

Findings Related to Research Question 2 – Practices in Establishing Teaching Presence

Within the temporal context of course delivery, the study identified four phases of delivery that served to reference the sequence of activities undertaken by instructors when establishing their presence in the online classroom. Of these four phases, the first three are associated with establishing presence, while the last is associated with maintaining presence. During the course preparation period prior to students having access to their online courses, the primary actions taken by instructors were to perform a thorough content review and develop an instructional plan. In this way, instructors convey their personality in the course content providing a sense of presence when they are not physically online with students. Instructors attention to content review and development of instructional strategies, indicate their awareness of the work intensity and length of engagement with students required in online teaching and supports Conceição’s (2006) findings, identifying that teaching begins even before students enter the classroom.

When students were provided access to their courses, during the preview period, the initial action taken by instructors was to send or post a welcome message which communicated more than logistical aspects of the course, providing an introduction to the
human qualities of the instructor. This form of personal disclosure provides a means to find connections with students upon which authentic relationships could be formed. The analysis of the collective case revealed that after this initial interaction, all instructors took a proactive stance during the first week of the course by initiating interactions with students, rather than waiting to respond to actions taken by students. This outreach to students not only confirmed instructors’ availability to provide support and assistance, but also communicated a direct interest in the student being an active participant in the learning process.

When the temporal lens was removed, four primary actions were identified as key to establishing presence: (a) forming authentic relationships with students, (b) being available for support and assistance, (c) providing guidance, and (d) building rapport. These actions support categories identified by Cox-Davenport (2010) in her study of social presence, including:

- The theme of “humanization” which communicates an understanding and empathy with students, providing a human connection for students with the content and the participants in the course.
- The theme of “meaningful socialization” which relates to building a community for a purpose, creating relevance for students through meaningful exchange of information, experience, and professional interests.
- The theme of “lifelines”, in which the instructor provides intentional support to students to ensure they remain connected to the course.

This case provides evidence that extends these themes beyond the context of social presence studied by Cox-Davenport, and supports her conclusion that online
instructors intend on creating learning environments in which students feel a connection to the human elements of the course.

**Findings Related to Research Question 3 – Intentions of Instructors**

The analysis of the collective case identified three primary recurrent themes associated with the intentions of instructors: (a) to ensure engagement and interaction that supported learning, (b) to connect with students in authentic ways, and (c) to serve as a resource to share experience and knowledge that guided learning. The actions that primarily supported the fulfillment of these intentions were identified to be: forming authentic relationships with students, building rapport, and setting and reinforcing expectations. The intentions of instructors echoed the interpretation they had of teaching presence, in which being responsive to student needs and being available to support and guide them established the role of the instructor as a facilitator of learning. These intentions relate to the following categories identified by Cox-Davenport:

- The theme of “facilitating connections” which helps students establish an awareness of each other and the commonalities within the group of peers that support learning.
- The theme of “student control” which relates to empowering students to be self-directed learners, recognizing the need to be present and involved in the learning process.
- The theme of “meaningful socialization” which relates to building a community for a purpose, creating relevance for students through meaningful exchange of information, experience, and professional interests.
- The theme of “lifelines”, in which the instructor provides intentional support to students to ensure they remain connected to the course.

*Findings Related to Research Question 4 – Influence on Intellectual Climate*

The analysis of the collective case revealed that by setting and reinforcing expectations for performance and participation, instructors established an academic tone of expected engagement, thereby supporting their intention of creating engagement and interaction that supported learning. The enthusiasm for teaching their courses, relayed the message to students that they had a genuine interest in sharing knowledge and experiences which had relevance to the students. Through these actions, instructors set the expectation of a shared responsibility for learning that relied on engagement and interaction among the student peers which inspired intellectual curiosity for advancement of personal learning related to the topics of the course. These actions related to creating the academic climate show some similarity to factors identified by Cox-Davenport associated with establishing the social climate of a course:

- The theme of “student control” which relates to empowering students to be self-directed learners, recognizing the need to be present and involved in the learning process.

- The theme of “cyber role model” whereby instructors model behavior of involvement and participation setting a tone and expectation for performance.

- The theme of “meaningful socialization” which relates to building a community for a purpose, creating relevance for students through meaningful exchange of information, experience, and professional interests.
Findings Related to the Overarching Research Question 1

The findings of this study provide insight into the overarching question that guided this study, how instructors establish teaching presence and inspire intellectual curiosity in their courses. Overall, the collective case revealed an active interest and passion for teaching that encouraged student participation and engagement and inspired a shared responsibility for the learning process, supporting Akyol and Garrison’s (2011) assertion that teaching presence becomes a shared responsibility of both instructor and students, with student participation being highly influenced by the instructor’s actions. The findings show that the common goal of learning shared by instructor and student had its foundations in the creation of authentic relationships between instructor and students. As was identified in the results, forming authentic relationships with students emerged as the primary theme in the analysis of actions related to establishing teaching presence, both in the analysis of the temporal context and the non-contextualized view. This finding is most greatly supportive of Cox-Davenport’s theme of “meaningful socialization”, focusing on relevance and purpose in forming relationships in the classroom.

As the collegial relationship is formed, the enthusiasm displayed by the instructor and identification of relevancy to students are actions that create an active interest in the course topics which not only increase engagement in the learning process, but inspire individual investigation and inquiry that contributes to group learning, demonstrating increased intellectual curiosity in the course topics that are important to the individual. It is suggested by the researcher that the ability to understand what is relevant to students and encourages them to delve deeper academically has its roots in the authentic
relationships formed between instructor and student, providing the instructor with the insight as to what motivates and ignites students’ curiosity.

Coming full circle, therefore, these findings provide support for the notion of a link between how an instructor establishes teaching presence and the level of intellectual curiosity that is displayed by students.

Findings Related to the Nature of Teaching Presence

Fundamental to this study was the exploration of the nature of teaching presence from an instructor’s perspective and the implications of this on establishing an intellectual climate in the online classroom. In the collective case, teaching presence was defined or perceived in terms of responsiveness to students’ needs and expectations. This interpretation is consistent with students’ evaluations with respect to instructors demonstrating a student-centered approach, assigning the highest rating to that criterion (3.76) of all criteria evaluated. Although in the Community of Inquiry (CoI) model teaching presence is defined in terms of facilitation of discourse and direct instruction, this interpretation reflects the close relationship teaching presence has with social presence while it is being established in the online classroom.

The interpretation of teaching presence offered by the collective case appears to be more reflective of social presence, which creates a level of trust that engenders a feeling of community among the participants of a course and is essential to the cohesion of the learning group (Cox-Davenport, 2010; Kaufmann et al., 2015). The perspective of teaching presence offered in the collective case is indicative of the instructors’ recognition that responding to needs and expectations of students establishes that environment of trust which precipitates the formation of a community of learning where
teaching presence is experienced. Although teaching presence as defined in the CoI model is clearly communicated as present in the later stages of their courses, the instructors’ interpretation of the construct conveyed that establishing teaching presence relies on forming trusting and authentic relationships and interactions with students through the responsiveness to their needs. This is consistent with the CoI model, which identifies teaching presence as a complex construct which bridges transactional distance by creating an environment within which social and cognitive processes can occur (Arbaugh & Hwang, 2006; Garrison, Cleveland-Innes, et al., 2010; Yang et al., 2016).

The perception of teaching presence indicated the instructors’ awareness of the depth of engagement required to be successful in the online environment, an awareness which was identified by Conceição (2006) in her study of the perceptions of online instructors. While depth of engagement was considered as a factor of work intensity in that early study, this finding indicates that depth of engagement extends beyond an awareness that both cognitive and social efforts are required to engage students, but that pedagogical approaches must have both cognitive and social dimensions in order to establish an active teaching presence.

The interpretation of teaching presence in the collective case included two other themes worthy of consideration. While not identified as recurrent themes on their own merit following the protocol in the interpretation of the collective case, the descriptors of availability to support students in learning and engagement with students provide a possible connection to the construct of teaching presence as defined by the CoI model. For example, the theme of availability to support students to guide learning can be interpreted to be indicative of the intent to provide direct instruction, while the theme of
engaging with students can be indicative of facilitation of discourse. The researcher proffers the interpretation that these two descriptors represent the same concept from opposing perspectives. Given that availability presumes a reactive stance whereby students are seeking help or guidance and engagement presumes a proactive stance whereby interaction is initiated as part of providing guidance, this has implications for understanding teaching presence and its’ role in establishing the relationship between the instructor and self-directed learners who consider the instructor as a resource to be accessed when developing insight and understanding of the course topics (Anderson, 2004; Shea & Bidjerano, 2009; Williams et al., 2016).

**Summary**

The ability to implement student centered strategies and effectiveness in teaching practices were the traits most recognized by students when evaluating the performance of their instructor however, in the evaluation of collective performance, course interaction was identified as the trait with the greatest differentiation between the collective case and performance of peers. It was suggested from the data that prior experience as an online student may have a relationship with performance related to course interaction. Additionally it was suggested from the collective case that prior teaching experience in face-to-face classroom environments might provide instructors with insights in how to apply teaching strategies to the online classroom.

Analysis of the temporal context provided a sequential perspective of the actions taken in establishing teaching presence. It is evident that actions taken to establish teaching presence occur at the time an instructor accepts responsibility for the teaching
assignment. These results show that instructors start planning for their presence in courses by conducting course content reviews and developing instructional strategies to address learning objectives. However the results indicate the greatest effort is made in forming authentic relationships with students as the key practice associated with establishing teaching presence. The importance of taking a proactive stance in forming these relationships was revealed in the analysis. When evaluating teaching presence without the temporal lens, forming authentic relationships with students also emerged as the primary practice utilized to establish teaching presence.

The analysis of the data from the collective case perspective revealed that instructors knowingly pursued these relationships with students with the intention of engaging and interacting for the purpose of supporting the learning process. The results showed the expectation of a shared responsibility for learning was communicated in the academic tone of the course, with instructors modeling the scholarly behaviors they wanted students would emulate. However, the results showed that it was the passion for the topics taught and the identification of relevance to the student that emerged as the practices most associated with increasing intellectual curiosity.

The results provided insight into the instructors’ perception of teaching presence and revealed their interpretation of the construct in terms of responsiveness to students’ needs and expectations. While this interpretation of teaching presence appeared to be more reflective of social presence, the results highlight the complexity of the phenomenon of teaching presence and its relationship with the social and cognitive processes that are required for learning to occur.
This investigation supported the goals of this study by cataloging the effective practices of successful instructors employed in establishing teaching presence, the intentions of utilizing those practices and the implications of those practices on setting the intellectual climate of a course by addressing the sub-questions posed in this study. These practices are described and cataloged in Appendix C.
Chapter 5

Conclusions, Implications, Recommendations and Summary

Introduction

The overarching research questions guiding this study was:

- RQ1: In a structured online environment, how do instructors establish teaching presence and inspire intellectual curiosity within the courses they teach?

The investigation into this conceptual question was supported using the following sub-questions:

- RQ2: In a structured online environment, what practices do instructors choose to employ when establishing teaching presence?
- RQ3: In a structured online environment, what are the intentions of instructors when determining which strategies will best help them establish teaching presence?
- RQ4: In a structured online environment, how do instructors perceive their decisions and practices relative to teaching presence and its influence on the intellectual climate in the classroom?
This chapter presents the conclusions of the researcher drawn from the findings of the collective case study of the phenomenon of teaching presence based on the qualitative evaluation of personal accounts of instructors regarding the practices used in establishing teaching presence. The implications of this research are discussed and its contribution to the body of knowledge related to pedagogical practices employed in online education will help inform faculty development programs and educators seeking to improve performance in delivery of online programs. Recommendations for future research are provided.

Conclusions

As articulated in the overarching research question (RQ1), the goal of this study was to provide insight into the nature of teaching presence from an instructor’s perspective and the implications of this on establishing an intellectual climate in the online classroom. Using a collective case study approach utilizing first person accounts of successful instructors, the results of this study revealed that social presence plays a key role in establishing teaching presence, when considered from the instructor’s perspective. The preferences of instructors clearly identified that they considered forming authentic relationships with students as the critical means of establishing teaching presence. This determination supports the premise of the Community of Inquiry (CoI) model, that social presence is an interdependent element that enables a community of learning to be established as investigated by Cox-Davenport (2010). Forming an authentic connection with students allowed the instructors to deliver course material in student-relevant contexts, and provided a collegial atmosphere whereby students could be challenged
intellectually without being intimidated by the status of the instructor. This empowerment of students resulted in instructors adopting a coach or mentor role as suggested by Stein et al. (2013). This study confirms that the online environment requires an active level of engagement with self-directed students who recognize a need for guidance and support from an experienced educator knowledgeable of the course topics (Williams et al., 2016).

The study resulted in documentation of the perceptions, intentions and practices influencing the establishment of teaching presence in the online environment. As a result of the investigation into which practices instructors chose in establishing their presence (RQ2), this study provided insight into the progression of instructional strategies as instructors sought to establish their presence. The findings showed that teaching presence begins to be established prior to students entering the classroom as a result of an instructor’s preparation for the teaching assignment, confirming Conceição’s (2006) early findings related to length and depth of engagement in online teaching. The results confirm that actions that produce a high level of visibility must be accompanied with intentional social and cognitive practices that are valued by adult learners. This line of inquiry related to the commonalities in actions and intent associated with establishing teaching presence, resulted in the cataloging and development of a vocabulary with which to describe the shared pedagogies of instructors associated with online instruction (Garrison & Arbaugh, 2007; Shea et al., 2010). This initial index of actions may serve as an ontological reference with respect to teaching presence in the online environment, supporting further classification and understanding of the phenomenon (see Appendix C).

Pedagogical approaches must have both social and cognitive dimensions in order to establish an active teaching presence. As the researcher explored the intentions behind
these pedagogical choices (RQ3), instructors repeatedly described the decision to take a proactive stance in establishing relationships with students to successfully gain the trust and respect that forms the foundation of authentic relationships. This intention of interaction extends beyond a welcome letter, and solicits students’ participation by providing relevant connections to the course topics at the very start of the course. The instructor sets an academic tone through his or her own actions and enthusiasm for the course, conveying a genuine interest in supporting the student through the learning process (Costley, 2015; Kyei-Blankson et al., 2016). By communicating an expectation of shared responsibility and common learning goals, the instructor creates an environment for open exchange of information and inspires collaboration among student peers.

The findings of this study suggest a relationship exists between how an instructor establishes teaching presence and the level of intellectual curiosity that is displayed by students. As interpreted from the accounts of the instructors related to the perceptions of the influence of their actions on the intellectual climate of the course (RQ4), it is indicated that by creating an inclusive learning environment, where contributions of students are not only encouraged, but respected and acknowledged as valuable, students are inspired to independently explore concepts related to the course in order to share the knowledge with peers or apply that knowledge to their own circumstances. Key to creating this environment is an instructor’s willingness to share the responsibility of teaching, not just learning, promoting collaborative and engaging interaction that develops critical thinking (Costley, 2015; Kyei-Blankson et al., 2016). This reciprocal relationship in the teaching and learning process, whereby instructors are confident
enough to defer to students’ experiences and knowledge, creates a teaching presence that is a shared agency in intellectual development that extends beyond the individual instructor (Tsiotakis & Jimoyiannis, 2016).

Strengths and Limitations

There were strengths and weaknesses associated with this study. The selection of the educational context, which required all instructors to deliver courses in a prescribed format, allowed the researcher to eliminate any variance in course delivery that may have affected the process of establishing teaching presence. While considered a strength by the researcher, this educational context can also be identified as a limitation of the study in that the structured environment is not adopted by a wide range of educational institutions due to concerns about academic freedom. Due to the constraints of the teaching environment, a limitation of this study was the generalizability of its findings to larger, less structured delivery mechanisms. However, as was suggested by Baran et al. (2013) exploring how instructors created their online presence in a variety of online teaching contexts could only deepen the understanding of online teaching practices and the role of instructors, as this study attempted to do. The findings of this study demonstrated the applicability of the CoI framework to a non-traditional delivery format, thereby transforming a known limitation into a factor for consideration in future studies.

A primary strength was the qualitative approach taken to study the phenomenon of teaching presence. The use of first-person accounts provided deep and descriptive data based on practical and authentic experiences and perceptions. The interview approach, based on Seidman’s (2006) three-part process, allowed the researcher to focus each interview segment on a different aspect of data collection. Gaining the perspectives of
instructors on decisions made, strategies implemented, and practices employed while establishing teaching presence provided insight to the practices affecting the learning process (Baran, et al., 2011; March & Lee, 2016).

Another strength of this study was the practical pedagogical perspective it sought, as opposed to an emphasis on the extension of theoretical exploration. While the CoI model informed the study, this research was focused on exploring the nature of teaching presence in an effort to identify practices that could commonly be regarded as effective in establishing teaching presence and accompanying implications for improving the practice of teaching. Using first-person accounts provided an authenticity and credibility to the data collected. Although not a central focus of the study, the findings resulted in contributions to the understanding of the construct of teaching presence, and supported the practical application of the theoretical concepts embodied in the CoI model.

**Implications**

This study contributes to the current body of knowledge with respect to two primary areas: (1) the expansion of application for identified theoretical frameworks and (2) the advancement of faculty development approaches from a practical pedagogical perspective.

*Expansion of Theoretical Frameworks*

This study was informed by the Community of Inquiry (CoI) model which presents the constructs of social presence, cognitive presence and teaching presence as fundamental elements of the theoretical framework used to understand the online learning experience. Although the primary objective of this study was related to practical
pedagogical findings, a substantive contribution made by this study in relation to the CoI model is the insight gained into the nature of teaching presence as seen through the eyes of experienced and successful instructors. While in the latter stages of their courses the instructors identified practices aligned closely with facilitating discourse and providing direct instruction used to describe the characteristics of teaching presence, it is the interpretation of the social aspects of their practices that are expressed during the establishment of teaching presence that contributes to the theoretical body of knowledge associated with the CoI framework.

The findings of this study indicate that social presence is a precursor to teaching presence and can influence the ability for an instructor to establish a successful learning environment. This study suggests that instructors consider social presence to be more substantive than visibility or responding to student inquiries; it requires a proactive stance from the instructor that is interpreted as genuine and authentic by students in order to develop the level of trust needed to establish a shared agency in the teaching and learning process (Kyei-Blankson, 2016). It is the authentic relationships formed as a result which enables teaching presence to be successfully established.

A second, and equally important contribution made by this study, is the evidence provided concerning the applicability of the CoI theoretical framework to a learning environment which has a pre-determined structure and formalized delivery format. While the selection of a research site which required the structured delivery format was presented as a means to eliminate any variance in course delivery which might impact identification of the participants’ actions related to establishing teaching presence, the ability to project a strong and viable teaching presence as demonstrated by the
participants within these confines supports the application of the CoI model to such environments. By expanding the area of investigation into this arena of higher education, this study presents new opportunities of exploration related to the CoI model and theoretical framework to future researchers.

The third area of contribution made by this study was in the extension of knowledge established in the previous studies by Conceição (2006), Cox-Davenport (2010) and Baran et al. (2013) identified by the researcher. First, the results of this study confirmed the findings of Conceição related to the depth and length of engagement with students identified as dimensions of work intensity. The comments of the instructors interviewed also reflected the rewarding nature of the relationships with students as noted in Conceição’s findings. Second, this study responded to the need identified by Baran et al. (2013) of gaining a deeper understanding of teaching presence and how instructors establish their online persona by exploring and documenting the practices, strategies, intentions and perspectives of successful instructors. Third, this study provides external validity for the findings of the Cox-Davenport study identifying the interdependency between social presence and teaching presence, but showing consistency in the practices and factors instructors use in creating a learning environment. Although her study identified humanizing practices as the overarching theme in creating a social climate that supported learning, this study identifies her theme of meaningful socialization as a critical factor in establishing teaching presence.

A final contribution in this area of expansion, is the application of an analytical method not traditionally used in qualitative studies conducted in online education. This study utilized the Interpretative Phenomenological Analysis (IPA) method as the
approach to analysis of the significant volume of qualitative data collected. The IPA method has largely been used in the discipline of psychology, mental health and related health sciences (Smith et al., 2009). This pragmatic method of immersion into the qualitative data, the highly annotated interpretation of meanings, language and descriptions, and the embedded requirement to address reflexivity, is not widely used in other disciplines. This study provides an example of its successful use in the analysis of phenomenological events in the discipline of online education.

**Advancement of Pedagogical Practices**

An underlying goal of this study was to identify commonalities in strategies, practices and methodologies which may serve as guidance in finding effective approaches for less experienced instructors, thereby increasing an awareness of instructor needs associated with faculty development programs as they are introduced or transitioned to online teaching responsibilities.

This study accomplished the goal by offering guidance to new and existing online instructors from the perspective of experienced and successful online instructors on practices that are effective in establishing teaching presence. By providing a temporal framework against which implementation of practices can be identified, instructors are informed of actions and their sequence which contribute to establishing a meaningful teaching presence. By documenting the instructional strategies employed by the participants, this study resulted in a list of defined actions selected for establishing teaching presence and setting an academic climate that inspires intellectual curiosity (see Appendix C). These practices, when deployed against the temporal settings of course
delivery provide guidance for new and experienced faculty who are transitioning to an online environment and challenged with creating their teaching presence.

While the practices themselves are actions that can be adopted and integrated into the delivery of any online course, the study suggests that an attitudinal shift is also required (Southcombe et al., 2015; Tsiotakis & Jimoyiannis, 2016). The recognition of the role of an instructor as a service-based leader as opposed to an expert-based leader of the course was predominantly expressed. This does not suggest that the instructor must not have subject matter expertise, it suggests that the service to students is the primary goal of successful instructors and that transfer of knowledge and experience plays a critical role in providing that service. This study suggests that a student-centered approach must be adopted to be successful in an online classroom in order to form deeper and more genuine relationships with the adult learners which engenders trust in the instructor and enables them to guide and challenge students in the courses they teach (Kyei-Blankson et al., 2016). This study suggests that an instructor new to the online environment should possess two important characteristics to be most successful: teaching experience in a face-to-face environment and experience as an online student. The first provides insight into pedagogical practices that can be used to address student needs and conveyance of course content; the second increases the sensitivity to the demands on an adult learner who struggles to find a balance between work, family and education (Brock & Abel, 2012).

The second implication of these research findings with respect to pedagogical practice is in the insight provided into the needs of instructors as they prepare to become online teachers. As was disclosed by the subjects of the study, a predominance of
institutions offer only technical training to new instructors, suggesting an embedded belief that online teaching is merely differentiated by the use of technology in delivery. While competency in the use of the technology is critical, the results of this study identify the importance of incorporating pedagogical training in the orientation of new instructors, including understanding the adult learner and differing learning styles addressed by the utilization of technology (Koehler & Mishra, 2009; Meyer & Murrell, 2014). Such training would provide experienced instructors an opportunity to recognize the connections with practices they employ in the face-to-face classroom and determine what adjustments might be needed (March & Lee, 2016).

The study suggests also, that an important part of this training is the incorporation of relationship building skills, in order to address the need for instructors to embrace a student-centered perspective in teaching and utilize that in establishing the authentic connections necessary to establish teaching presence. It is the researcher’s opinion that this training should be experiential in nature, requiring instructors to balance the same demands of their adult learners but offering a compassionate delivery that does not disqualify them from teaching should they find the challenges overwhelming. This position is supported by a study conducted by Meyer and Murrell (2014), which concluded while some instructors engaging in this type of training may determine that the length and depth of engagement exceeds their ability to deliver, training environments such as suggested would yield a level of sensitivity to their students that would enable the formation to genuine and authentic connections necessary to the development of trust (Brock & Abel, 2012).


**Recommendations**

Emerging from this research are opportunities for future research that will broaden the understanding of the nature of teaching presence and the practices used to establish it in the online classroom. The first area of research suggested is to determine whether similar attitudes and practices are expressed by experienced instructors in different educational settings using both prescribed and unstructured delivery approaches. The selection of a research site where all instructors utilized the same technology and the same instructional delivery procedures eliminated a level of variability which exists in other institutional settings, but confined the generalizability of the findings. This study produced a vocabulary which can now be used in identification and classification of practices utilized by instructors during this critical phase of teaching. Studies such as suggested may provide external validity to the findings of this study and increase the generalizability to contexts beyond the structured delivery environment.

A second area for investigation relates to the effectiveness of pedagogical training for online instructors. In most online institutions the predominance of instructors are selected for their subject matter expertise and serve as adjunct faculty without the extensive support for professional development related to teaching. The study identified the lack of pedagogical training offered to new and existing online instructors. This recommendation for research implies that institutions would accept the premise offered herein that pedagogical training is beneficial and necessary, thereby creating the opportunity to study the impact of such training on an instructor’s performance.

A third area of research is the continued exploration into the relationship between social presence and teaching presence, and the potential causal relationship which may
exist between the two. While such studies would offer primarily theoretical potential, there may be opportunity to further explore the practical pedagogical implications of such a relationship between the two constructs.

Lastly, there are natural extensions for research identified by the researcher from the data collected for this study. As disclosed in this document, the subject cases were equally divided by gender which enables further investigation into whether gender differences occur in attitudes and practices. Such an analysis may yield deeper insight into choices made in the application of particular pedagogical practices.

Summary

The overarching research question that guided this study was how, in a structured environment, an online instructor established teaching presence and inspired intellectual curiosity in their courses. This question was supported by underlying sub-questions that provided depth to this investigation by asking (1) what practices did instructors choose to employ in establishing teaching presence, (2) what were the intentions of instructors in determining which strategies helped them establish teaching presence, and (3) how did instructors perceive their decisions and practices relative to teaching presence and its influence on the intellectual climate in their classroom.

The primary goal of this study was to utilize the experiences of instructors to explore these questions in order to address the need to understand the nature of teaching presence from an instructor’s perspective. This exploration provided an opportunity to utilize instructor’s first-person accounts and insights to achieve the stated goals of (1) cataloging effective practices instructors employed while establishing teaching presence,
(2) understanding why they selected those practices, (3) describing how the practices were implemented, and (4) identifying the implications these practices had for setting the intellectual climate in their courses.

In order to achieve these goals, a qualitative exploration of instructor first-person accounts was conducted using collective case study methodology due to its ability to help develop an in-depth understanding of the intentions and perceptions associated with processes undertaken by the instructors. In order to conduct this study, six subject cases were selected on the basis of their performance as indicated through selected criteria rated by students in the end of course evaluations. These six cases formed the collective case. Two pilot cases were selected by the researcher primarily for methodological purposes; however, the researcher found the use of these pilot cases to be extremely helpful in familiarizing herself with the interview process and in the utilization of the Nvivo software during the analysis phase of the project.

This approach utilized semi-structured interviews as the main source of data collection. These interviews were conducted in three phases as described in Chapter 3, whereby the researcher explored the life history of the instructor as it pertained to their educational background, details of their experiences in the online classroom with particular attention to the processes used in establishing teaching presence, and reflection on the meaning of teaching presence to them and the implications of their choices on student learning and the demonstration of intellectual curiosity.

The in-depth interview techniques used in data collection supported the exploration of instructor’s intentions, actions, and perceptions when establishing their presence in the online course environment. The study utilized the Interpretative
Phenomenological Analysis (IPA) method as an analytical tool to address concerns of rigor in the qualitative interpretation of experiential data. Interpretative Phenomenological Analysis (IPA) is an experiential qualitative research method which provides a systematic approach to interpreting first person accounts of experiences. This method of analysis provided the researcher a framework to first conduct within-case analyses, providing detailed descriptions and theme identification within each case, followed by a cross-case analysis which involved thematic examination across all cases.

Results yielded through this investigation identified commonalities in profiles, attitudes, practices and intentions of instructors as described in Chapter 4. Fundamental to the findings was the consistent interpretation of teaching presence in terms of a service-oriented role addressing the needs and expectations of students during the early stages of establishing that presence. Although instructors conveyed their presence in the course materials during preparation for teaching assignments, primary practices employed by instructors while establishing teaching presence related to forming authentic relationships with their students from the moment students entered the classroom. This foundation extended beyond a simple social connection with students, but rather required a proactive stance by the instructor in building rapport and establishing genuine and authentic relationships with the students they served.

The need to connect to students in these authentic ways was primarily driven by the intent of the instructor to engage and interact with students for the purposes of establishing themselves as a credible and trusted resource as they guided them through the course requirements. A mutual respect for expertise, experience and contributions to the learning environment developed among the course participants as a result of these
authentic connections. This relationship formed the basis on which instructors could challenge and encourage students to meet academic expectations without being considered formidable or pejorative. As a shared responsibility in the teaching and learning process was communicated through the instructors’ actions, instructors perceived an increased level intellectual curiosity and collaboration among students as they understood the relevance and importance of the topics to their particular situations.

The results of this study support and expand upon previous qualitative studies conducted by Conceicão (2006), Cox-Davenport (2010) and Baran et al. (2013). The findings show that successful instructors not only recognize but commit to the depth and length of engagement with their students as suggested by Conceicão. The relationships formed extend their connections with students provide new dimensions to the teaching experience as reflected in Conceicão’s study, even though there is an impact on the work intensity associated with online teaching. This study answers questions raised in the study by Baran et al. (2013) about the effective practices that would better inform and enable instructors in transition from face-to-face environments to online teaching, by providing insight into the practices, strategies, intentions and perspectives of successful instructors. Lastly, the results of this study showed consistency in the practices or factors associated with creating the learning environment as reported in the research conducted by Cox-Davenport. The findings of this study provide external validity for the findings of her study, and highlight the interdependence between social presence and teaching presence as concluded in her study.

By using the instructor’s perspectives as a basis of investigation, this research contributes from a practical pedagogical perspective to the current body of knowledge
associated with teaching presence in three important areas. First, this study provides a unique perspective on the nature of teaching presence at the initial stage of establishment and the interpretation of its meaning to online instructors. Second, the findings offer guidance to new and existing online instructors on effective practices that can be used to establish teaching presence and create an intellectually inspiring learning environment. Third, this study provides insight into the training requirements of new and existing online instructors that extend beyond technical training.

Concluding Thoughts

The addressable problem of this study was the need to understand the nature of teaching presence from the perspective of the online instructor. This construct as presented in the Community of Inquiry (CoI) framework identifies the importance of the instructor to be actively engaged in the learning process through facilitation of discourse and direct instruction. The findings of this study support this, but have also provided insight into how instructors use the construct of social presence to establish the credibility needed for an effective teaching presence. This study supports the concept that teaching presence is intentionally and deliberately created by an instructor as suggested by Lehman and Conceição (2010), but the results convey the integral role of forming genuine and authentic relationships in doing so. With the insight gained into the effective practices of instructors utilized when establishing teaching presence, this study identifies and informs the needs for pedagogical development of new and existing online instructors. This study contributes to the ongoing exploration of the CoI framework and its application to the creation of intellectually stimulating learning environments from a practical pedagogical perspective.
Appendices
Appendix A

Institutional Review Board Documentation

MEMORANDUM

To: Ms. Janice Orcutt
   College of Computer and Information Sciences

From: Matthew Seamon, Pharm.D., JD
      Chair, Institutional Review Board

Date: May 16, 2016

Re: Teaching Presence and Intellectual Climate in a Structured Online Learning Environment – NSU IRB No. 05221459Exp

I have reviewed the above-referenced research protocol in keeping with Continuing Review requirements by an expedited procedure. On behalf of the Institutional Review Board of Nova Southeastern University, Teaching Presence and Intellectual Climate in a Structured Online Learning Environment is approved. Your study is approved on May 16, 2016 and is approved until May 15, 2017. You are required to submit for continuing review by April 16, 2017. As principal investigator, you must adhere to the following requirements:

1) ADVERSE EVENTS/UNANTICIPATED PROBLEMS: The principal investigator is required to notify the IRB chair of any adverse reactions that may develop as a result of this study. Approval may be withdrawn if the problem is serious.

2) AMENDMENTS: Any changes in the study (e.g., procedures, new recruitment, investigators, etc.) must be approved by the IRB prior to implementation.

3) CONTINUING REVIEWS: A continuing review (progress report) must be submitted by the continuing review date noted above. Please see the IRB web site for continuing review information.

4) FINAL REPORT: You are required to notify the IRB Office within 30 days of the conclusion of the research that the study has ended via the IRB Closing Report form.


Cc: Dr. Ling Wang
    Dr. Laurie Oringus
    Mr. William Smith
April 14, 2014

Janice,

This letter authorizes you to use the University of Fairfax as a research site for your research on online education. You are granted permission to use course related data and student evaluation data collected from eCollege for this research and other related research studies. You are granted permission to contact faculty members who were actively teaching while you were an administrator at the University for the purposes of your research. Your access to faculty and data provided by the University under this permission will be limited under the following conditions:

- You must receive IRB approval from your institution (Nova Southeastern University) to conduct your dissertation research.
- You must have faculty members who serve as participants in your study sign an Informed Consent prior to conducting any interviews.
- All data must be destroyed within three years of the publication of your dissertation.

If you have any further questions regarding your limitations on access to faculty or use of the data provided to you, please feel free to contact me.

Respectfully,

Crystal Keels, PhD
Dean, Academic Services
March 24, 2009

Janice,

This letter authorizes you to use the University of Fairfax as a research site for your research as part of your doctoral degree at Nova Southeastern University. You are granted permission to use course related data and student evaluation data that you collect from eCollege for this research and other related research studies on online education. You are granted permission to contact faculty members who teach at the University for the purposes of your research.

Sincerely,

Victor N. Berlin
President and Founder
Appendix B

Interview Guides

Interview Segment 1: Life History

Introductory Script

1. Request verbal consent of participant that recording is acceptable and commence audio recording; and
   
   Hi, [Name], I am required in the state of Maryland to get consent before I can record the interview. Do I have your consent to do so?

   [If consent is positive] OK, if you are ready to go, I will now start the recording; the system may actually put you on hold for a moment and tell you that I am recording the session, but once it does we can start.

   [If consent is negative the researcher will discuss the concerns and if not possible to get consent, the interview will be terminated]

2. Explain the purpose of the interview:
   
   Thank you for participating in this research project. As was explained in our earlier conversations and in the Informed Consent document you signed the purpose of my research is to understand how instructors in structured online environments, like the delivery approach used at UoF, make themselves visible in their online classes and inspire intellectual curiosity within the courses they teach. This in-depth interview will take place in three parts and starts today with a focus on your teaching background and what led you to becoming an online teacher. Do you feel that we can cover that today?

3. Address terms of confidentiality;
   
   As you know I will be recording this interview, so I will be taking steps to protect your identity, but I will not be able to completely assure that confidentiality will be guaranteed. Also, my advisor and members of the University’s IRB have authority to review the audio tapes and any of the research material, and I am always required to disclose information if required by law. Are you comfortable with these conditions?

4. Explain the format of the interview;
   
   The format of this interview is called semi-structured. I will open up a question or topic and ask you to provide as detailed as an answer as possible, providing examples and recounting experiences in as full detail as possible so that I can understand your experience and perspective as fully as possible. If something is unclear I will ask you to explain it to me. But essentially I am here to listen and you are here to tell me a story with as much detail as you care to give me. Do you understand the flow of the interview as I have described it?
5. Indicate how long the interview will take;
   *I have scheduled up to 90 minutes for this interview, if we take the entire time that is fine, if we don’t that is fine as well. I don’t want you to feel that you are rushed or need to shorten your explanations or descriptions due to a time limitation. Is your schedule clear enough to give us time to complete the interview today?*

6. Explain the procedure that will be followed if the interview call is terminated or interrupted unexpectedly;
   *I will be recording this interview and we are using a free conference system that runs on the internet. I am calling from my computer using Skype so if something goes wrong you can call me directly on my cell phone which is sitting right next to me – here’s my number – 301-802-5702. If for some reason we get disconnected during the call, I would recommend that we try to reconnect first -- just hang up and wait a minute or two and then call back in to the same meeting number. I can start the recording again and we can start where we left off. However, if that doesn’t work, then call my cell and we will make a determination of what to do, whether to reschedule or whether we have gone far enough into the interview to consider it finished. Will that work for you?*

7. Allow the participant to get clarification on any concerns or doubts about the interview or research project;
   *Before we get into the meat of the interview do you have any concerns or doubts about the research project that I can address now?*

8. Begin the research interview and note taking.

Data Collection – Sample Questions:

1. Could you tell me about your professional background?

2. Can you describe for me what led you to teaching?

3. Tell me about how you got involved in online teaching.

4. How did you learn to be an online teacher?

5. Tell me about teaching in structured environments like [research site].

6. What are the main differences in teaching in a structured environment like [research site] and other institutions you’ve taught at?
Interview Segment 2: Details of Experience

Introductory Script
1. Request verbal consent of participant that recording is acceptable and commence audio recording; and
   Welcome back – [Name], as I explained last time I am required in the state of Maryland to get consent before I can record the interview. Do I have your consent to do so?
   [If consent is positive] OK, if you are ready to go, I will now start the recording; the system may actually put you on hold for a moment and tell you that I am recording the session, but once it does we can start.
   [If consent is negative the researcher will discuss the concerns and if not possible to get consent, the interview will be terminated]

2. Explain the purpose of the interview:
   Thank you for your continued participation, [Last week, time appropriate] we covered a lot of ground! Today’s interview will be the second of three parts of the in-depth interview and will focus on what you actually do inside the online classroom to let students know you are there and to help them learn. Do you feel that we can cover that today?

3. Address terms of confidentiality;
   Again as a reminder I will be recording this interview, so I will be taking steps to protect your identity, but I will not be able to completely assure that confidentiality will be guaranteed. Also, my advisor and members of the University’s IRB have authority to review the audio tapes and any of the research material, and I am always required to disclose information if required by law. Are you comfortable with these conditions?

4. Explain the format of the interview;
   The format of this interview is called semi-structured. As with the previous interview, I will open up a question or topic and ask you to provide as detailed an answer as possible, providing examples and recounting experiences in as full detail as possible so that I can understand your experience and perspective as fully as possible. If something is unclear I will ask you to explain it to me. But essentially I am here to listen and you are here to tell me a story with as much detail as you care to give me. Do you understand the flow of the interview as I have described it?

5. Indicate how long the interview will take;
   I have scheduled up to 90 minutes for this interview, if we take the entire time that is fine, if we don’t that is fine as well. I don’t want you to feel that you are rushed or need to shorten your explanations or descriptions due to a time limitation. Is your schedule clear enough to give us time to complete the interview today?
6. Explain the procedure that will be followed if the interview call is terminated or interrupted unexpectedly;

*I will be recording this interview and we are using a free conference system that runs on the internet. I am calling from my computer using Skype so if something goes wrong you can call me directly on my cell phone which is sitting right next to me – here’s my number – 301-802-5702. If for some reason we get disconnected during the call, I would recommend that we try to reconnect first -- just hang up and wait a minute or two and then call back in to the same meeting number. I can start the recording again and we can start where we left off. However, if that doesn’t work, then call my cell and we will make a determination of what to do, whether to reschedule or whether we have gone far enough into the interview to consider it finished. Will that work for you?*

7. Allow the participant to get clarification on any concerns or doubts about the interview or research project;

*Before we get into the meat of the interview do you have any concerns or doubts about the research project that I can address now?*

8. Begin research interview and note taking.

Data Collection – Sample Questions:

1. Tell me about how you prepare for teaching a class at [research site].

2. Take me through the steps you take to let students know you are the instructor when classes start.

3. Describe any specific actions you take on the first day or during the first week to establish your presence in the class.
   a. Follow on: Tell me how you maintain your presence after the first week.

4. Tell me about the different types of interaction you have with students in the online classroom.

5. What are the main differences between the presence you have in the classroom at the beginning of the term and at other times during the term?

6. Describe any specific actions you take to set the academic tone of your courses.
Interview Segment 3: Reflections on Meaning

Introductory Script

1. Request verbal consent of participant that recording is acceptable and commence audio recording; and

   Last time! [Name], Once again, I am required in the state of Maryland to get consent before I can record the interview. Do I have your consent to do so?
   [If consent is positive] OK, if you are ready to go, I will now start the recording; the system may actually put you on hold for a moment and tell you that I am recording the session, but once it does we can start.
   [If consent is negative the researcher will discuss the concerns and if not possible to get consent, the interview will be terminated]

2. Explain the purpose of the interview:

   Thank you again for your participation [last week, time appropriate] we have covered so much and today we will wrap it up! Today’s interview will be the last of three parts of the in-depth interview and will focus on the meanings behind your actions, your intentions and your perceptions of the results of your actions. Do you feel that we can cover that today?

3. Address terms of confidentiality:

   Again as a reminder I will be recording this interview, so I will be taking steps to protect your identity, but I will not be able to completely assure that confidentiality will be guaranteed. Also, my advisor and members of the University’s IRB have authority to review the audio tapes and any of the research material, and I am always required to disclose information if required by law. Are you comfortable with these conditions?

4. Explain the format of the interview:

   The format of this interview will again be semi-structured. As with the previous interviews, I will open up a question or topic and ask you to provide as detailed an answer as possible, providing examples and recounting experiences in as full detail as possible so that I can understand your experience and perspective as fully as possible. If something is unclear I will ask you to explain it to me. But essentially I am here to listen and you are here to tell me a story with as much detail as you care to give me. Do you understand the flow of the interview as I have described it?

5. Indicate how long the interview will take:

   I have scheduled up to 90 minutes for this interview, if we take the entire time that is fine, if we don’t that is fine as well. I don’t want you to feel that you are rushed or need to shorten your explanations or descriptions due to a time limitation. Is your schedule clear enough to give us time to complete the interview today?
6. Explain the procedure that will be followed if the interview call is terminated or interrupted unexpectedly;

*I will be recording this interview and we are using a free conference system that runs on the internet. I am calling from my computer using Skype so if something goes wrong you can call me directly on my cell phone which is sitting right next to me – here’s my number – 301-802-5702. If for some reason we get disconnected during the call, I would recommend that we try to reconnect first -- just hang up and wait a minute or two and then call back in to the same meeting number. I can start the recording again and we can start where we left off. However, if that doesn’t work, then call my cell and we will make a determination of what to do, whether to reschedule or whether we have gone far enough into the interview to consider it finished. Will that work for you?*

7. Allow the participant to get clarification on any concerns or doubts about the interview or research project;

*Before we get into the interview do you have any remaining concerns or doubts about the research project that I can address now? Is there any reason you wish to discontinue your participation in the research study today?*

8. Begin research interview and note taking.

Data Collection – Sample Questions:

1. Describe what “being present” as the instructor in an online class means to you.

2. Describe for me how present you choose to be in your courses and why.

3. Tell me about why you chose to [refer to an action identified in Session 2] – what were your intentions with respect to that?

4. Out of the actions you have described in our last interview, which do you think are the most effective in establishing your presence in the online classroom and why?

5. What differences or challenges does teaching in a structured environment create for establishing your presence in the online classroom?

6. How do you think your presence affects your students’ academic interest or performance?
Appendix C

Practices Used in Establishing Teaching Presence

The practices identified as a result of the thematic categorization performed during analysis are presented here with keywords used to describe the essential descriptor of the action.

Acknowledge Acknowledge Student Contributions – A proactive incorporation of student contributions (postings, presentations, etc.) in course activities which draws students into the course, capitalizes on collaboration, creates opportunities for student-led teaching, and acknowledges a shared agency in learning.

Announce Post Announcements – Utilize centralized course area to post important reminders that inform or update students of course schedules, due dates, or other critical schedule items that may impact the delivery of the course.

Attendance Note Attendance and Participation – Visit the course regularly, being aware of student engagement, following up when students do not participate and reinforcing expectations of involvement in encouraging ways.

Authentic Form Authentic Relationships – The development of authentic relationships with students, connecting on areas of personal interests related to the course or professional goals, creating a foundation of trust in the instructor and a basis for open communication.

Challenge Challenge Students – Generate interest in the topics and uphold the expectations of rigor and performance through the design of course activities, motivating students to extend beyond the textbook, the course room and potentially their own boundaries.

Communicate Communicate Clearly and Frequently – Establish regular process of informing or updating students in clearly understood language, without jargon or overcomplicated instructions, via predetermined methods (announcements, emails); respond to inquiries and requests within agreed to timelines.
Expectations

Set / Reinforce Expectations: Setting clear expectations of rigor and performance commensurate with course level and degree program in student friendly language, providing these in written and verbal form, and reinforcing them in practice through clear instructions, examples, and formative feedback.

Facilitate

Facilitate Discourse – Engage in discussions in ways that encourage student contributions and involvement, acknowledging student contributions by both constructively building upon or synthesizing the contributions of others as well as seeking original input and thoughtful response; asking probing questions that develop critical thinking skills, encouraging further interactions; noticing when someone is not participating and inviting them to engage in the dialogue.

Feedback

Provide Substantive and Constructive Feedback – Provide feedback to students that stimulates thinking, challenges them to view their responses through a different perspective, or provide a path that offers deeper insight into a topic area.

Follow-Up

Follow Up with Non-Participants – Sending non-judgmental notes to those who fall behind or do not attend, asking if they have encountered problems, offering support, making sure they understood deadlines, encouraging participation.

Guidance

Provide Guidance – Serve as an accessible resource for information and substantive feedback, cognizant of needs for timely responses and formative direction to ensure understanding of course concepts and requirements.

Humanize

Humanize Course – A thorough review of the course content and preparation for teaching, ensuring that the learning environment represents the instructor and meets the needs of the student; projecting warmth and sincerity which allows for the development of authentic relationships with students creating a foundation of trust in the instructor.

Include

Include Students in Teaching – Provide students an active role in the teaching process through assignments or volunteerism; create opportunities for students to take the lead in instructional opportunities.

Initiate

Initiate Interactions – The proactive engagement of students through communications of various forms (e.g., email, postings) which inspire student response and involvement in the course activities.
Model Behavior – The instructor establishes a prototype for thinking and classroom behavior through personal example, then encourages students to meet performance requirements while overseeing, guiding and directing students as they emulate or adapt instructor’s approach.

Obstacles Reduce Obstacles to Access – The instructor proactively establishes multiples paths of communication and maintains high levels of availability to ensure students do not encounter issues accessing them when support or guidance is requested. Instructors will establish and ensure specific response times to inquiries and maintain office hours that enable students accessibility to them as a resource.

Active Interest/Passion in the Course: Exhibit an enthusiasm for teaching the course, relaying the message to students that the instructor enjoys the topic and has a genuine interest in sharing knowledge and experiences.

Develop Instructional Plan – The consideration of course learning objectives, activities that assists in student achievement, identification of resources and discussion questions that motivate students and generate interest in the topics; the creation of a weekly plan which is referred to and executed to ensure learning objectives are attained.

Respond to Posts – Visiting the course regularly, engaging in discussion forums, responding to student posts, asking probing questions that develop critical thinking skills, encouraging further interactions; acknowledging student contributions.

Listen and Ask Questions – The instructor encourages and builds cohesion within the group by asking questions, directing and guiding conversations to be inclusive, while also developing the capacity for independent action, initiative and responsibility of the individual student as a member of the learning community.

Establish and develop a collegial or peer-level relationship with students based on common interests, experiences, or understandings that builds trust and enhances communications.

Identify Relevance to Student – Preparation of course content, activities, and assignments acknowledging student perspective and interests, and tailoring course assignments to the needs and interests of the student.
<table>
<thead>
<tr>
<th>Resource</th>
<th>Serve as a Resource to Students – Ability to articulate and share mastery of topic knowledge and/or skills or have ability to direct students to resources that will enhance in-depth exploration of topic; ability to guide students through scholarly process of exploration.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respond</td>
<td>Respond to Inquiries – Visiting the course regularly, responding to student inquiries whether via posts, emails or questions during synchronous sessions; meeting agreed to timelines for responsive communication.</td>
</tr>
<tr>
<td>Review</td>
<td>Content Review – A thorough review of the course content, checking it for accuracy, currency and relevancy, ensuring that the learning environment is ready for students; ensuring familiarization with content and sequence of materials.</td>
</tr>
<tr>
<td>Shared</td>
<td>Promote Shared Responsibility for Learning – Provide students an active role and responsibility in the teaching and learning process with an active voice in the topics covered in the course or path of learning, inspiring collaborative contribution, personal accountability, and engagement in learning community; instructor provides guidance where needed.</td>
</tr>
<tr>
<td>Supplement</td>
<td>Supplement Course Material – Provide supplemental materials, such as articles, or videos, extending the course beyond the textbook and the course room, personalizing it for the instructor and tailoring it to student interests; incorporation of supplemental materials to support current themes in the discipline or provide examples of relevancy to students.</td>
</tr>
<tr>
<td>Support</td>
<td>Available for Support / Assistance – Send a consistent message that the role of the instructor is to support the academic goals of the students and that the instructor is accessible and available to do so.</td>
</tr>
<tr>
<td>Welcome</td>
<td>Send / Post Welcome Letter – The preparation and distribution of a welcome email or announcement that contains personal introduction of instructor, a synopsis of the course, objectives, reminders of dates, requirements for participation, and a “starter list” of activities for students to complete. This may include reposting portions of the welcome as separate announcements or reminders in the course shell.</td>
</tr>
</tbody>
</table>
References


Niess, M., & Gillow-Wiles, H. (2013). Developing asynchronous online courses: key instructional strategies in a social metacognitive constructivist learning trajectory. The *Journal of Distance Education/Revue de l’Éducation à Distance, 27*(1).


