Best Practices for Enhancing Teaching Presence in Online Courses

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Abstract

Online education has become increasingly popular in graduate nursing education. Establishing a strong sense of teaching presence in online courses requires planning and effort on the part of the instructor. The purpose of this project was to develop an evidence-based online asynchronous educational module to enhance nurse educators' teaching presence behaviors in online courses. Teaching presence survey tools were developed and pilot tested to evaluate instructors' self-reported teaching presence behaviors over time, as well as their intent and actual follow-through in performing teaching presence behaviors. Despite statistically significant higher levels of participants' intent to perform teaching presence behaviors following the educational module, there was no significant change in the frequency of teaching presence behaviors reported by participants 8 weeks after completion of the module. Overall, the self-reported scores for each of the teaching presence behaviors on the surveys was high, offering little perceived room for improvement in this group of experienced instructors.

Keywords: Community of Inquiry, faculty development, online learning, teaching presence

CHAPTER 1: INTRODUCTION

Background and Significance

The use of online education has grown dramatically in the last decade (Allen & Seaman, 2015; Christensen, Horn, Caldera, & Soares, 2011; Fish, & Wickersham, 2009) and has become increasingly popular in graduate nursing education. Fueled by the rapid and continuous development of distance learning technologies, this trend in nursing education is likely to grow and require increasing numbers of faculty members prepared to teach in the virtual environment. Online education is typically defined by researchers as a course or program where 80% or more of the course content is delivered online with very limited to no face-to-face meetings (Allen & Seaman, 2015). According to a survey on the state of online higher education in United States, 6.7 million (approximately one-third) of all college students have enrolled in at least one online course (Allen & Seaman, 2013).

Comparisons have been made between face-to-face and online instruction, however, one professor likened such contrasts to a comparison between pomegranates and tomatoes due to the vast differences between the two teaching modalities (Weimer, 2015). A new and different skill set is required for online teaching which requires instructors to take more of the "guide-on-the-side" rather than the "sage-on-the-stage" approach to teaching (Pallof & Pratt, 1999; Pallor & Pratt, 2002).

A systematic literature review and meta-analysis done by the U.S. Department of Education found modest learning improvements for online students compared to those receiving face-to-face instruction (Means, Toyama, Murphy, Bakia, & Jones, 2010). Student engagement in online courses is essential to learning success (Bangert, 2004), with a positive relationship between student engagement, higher order thinking, and application of knowledge (Chen,

Lambert, & Guidry, 2010; Hu & Kuh, 2001; Robinson & Hullinger, 2008). A sense of community among online learners must be developed for student engagement to flourish (Lear, 2010). Du, Liu and Brown (2010) define an online learning community as "a group of diverse individuals united by communication media who develop a sense of trust and connectedness through online interaction and collaboration" (p. 119). Learner-instructor interaction was identified as one of the recommended best practices for motivating learners (Bangert, 2004; Chickering & Ehrmann, 1996).

In successful online courses students interact with one another, the instructor, and the course material in what is known as a *Community of Inquiry* (CoI) (Garrison, Anderson, & Archer, 2000). Originally designed for research in online educational practice, the CoI framework is a process model of online learning founded on teaching and learning theories in higher education, and John Dewey's educational philosophy of collaborative constructivism and practical inquiry (Swan, Garrison & Richardson, 2009). The CoI model is a framework consisting of three elements deemed essential in online learning—cognitive presence, social presence, and teaching presence (see Appendix A). Cognitive presence is defined as the "extent to which participants in any particular configuration of a community of inquiry are able to construct meaning through sustained communication" (Garrison, et al., 2000, p. 89). Social presence is "the degree to which participants in computer-mediated communication feel affectively connected to one another" (Garrison, et al., 2000, p. 89). Teaching presence is defined as "the design, facilitation and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile outcomes" (Anderson, Rourke, Garrison, and Archer, 2001, p. 163).

Within the CoI model, teaching presence is further conceptualized as having three components: (1) instructional design and organization; (2) facilitation of discourse; and (3) direct instruction (Garrison & Arbaugh, 2007). Teaching presence begins prior to the start of the course as the teacher designs, plans, and organizes the course, and it continues once the course is underway as the teacher administers the learning experiences, facilitates discourse, and provides direct instruction as needed (Anderson, Liam, Garrison, & Archer, 2001). Garrison, et al., (2000) refer to teaching presence as the "binding element in creating a community of inquiry," noting its importance in establishing both social and cognitive presence (Garrison, et al., 2000, p. 96). Online courses lack the physical presence of the instructor as in face-to-face courses, and often rely heavily on written text (Anderson, et al., 2001). Establishing a strong sense of teaching presence in online courses doesn't just happen automatically, but rather, requires planning and effort on the part of the instructor. Teaching presence, along with its three components of instructional design and organization; facilitation of discourse; and direct instruction, served as the focus for this DNP project.

Problem Statement

Faculty are not being adequately prepared prior to teaching online (Conrad, 2004; Keramidas, Ludlow, Collins, & Baird, 2007; Kosak et al., 2004; Zsohar & Smith, 2008). Many new educators are recruited, hired, and immediately put into positions of teaching without any prior knowledge or experience in the educator role, and with little preparation on the job (Zungolo, 2004). The role of the nurse educator requires a breadth of knowledge and the development of skills and core competencies (Halstead, 2007). This preparation and skill development is ideally begun in graduate level courses specific to the role of the nurse educator, however, not all doctoral or master's degree programs in nursing offer courses specific to the

nurse educator role in their curricula. In fact, many, if not most, graduates with advanced degrees in nursing have never had any courses or specific education to prepare them to teach nursing (Zungolo, 2004), let alone to teach an online course.

Many faculty members have described feeling overwhelmed or intimidated with the technological challenges of online teaching (Coppola, et al., 2002; Sword, 2012). The average age of nursing faculty members in the state of Arizona is currently 54 years (AACN, 2014c) placing them in the "digital immigrant" category described by Prensky (2001) as persons who grew up in a world without computers and thereby often lack confidence and familiarity with using technology (Prensky, 2001).

In general, nursing faculty report they do not feel prepared to teach online and have had limited to no formal preparation or experience in the pedagogy of online education (Cuellar, 2002; Johnson, 2008; Sword, 2012; Zsohar & Smith, 2008). Ray (2000) conducted a quantitative study of experienced online educators to provide faculty perspectives of the importance of training for online teaching. Those teaching in online courses overwhelmingly concluded that faculty members should be required to have preparation prior to teaching online for the first time (Ray, 2009). Johnson (2008) and Sword (2012) independently studied the needs of faculty members who had transitioned from teaching in the classroom to online teaching. The experience of transitioning to teaching online from classroom teaching was described as in the Sword (2012) study as "disillusionment with the lack of or limited administrative support in terms of communication, resources, mentors, orientation, and professional development" (Sword, 2012, p. 270). Both of these studies pointed to the need for more support and education related to online teaching (Johnson, 2008; Sword, 2012). Even

faculty members with online teaching experience expressed a desire for ongoing professional education in pedagogy as well as technology (Kosak et al. 2004; Ray, 2009).

Internal Evidence

Consistent with the literature review, most new nurse educators at this author's organization, a public Research 1 Doctoral University (Indiana University Center for Postsecondary Research, 2015), also reported little or no previous teaching preparation to serve as a foundation for their new roles in academia. Despite wide and varied backgrounds and experiences as expert nurse clinicians and leaders, many described a steep learning curve as they discovered all facets of the faculty role. Mentoring new faculty mentors was an informal process and varied widely on how it was implemented. At a recent faculty meeting, several new faculty members shared their desires for additional mentoring and support.

Most of the graduate nursing programs in this college of nursing (CON) have converted to an online program format, but there was no mandatory preparation or program in place to assist in preparing faculty members for teaching online. Seasoned nurse educators at this CON, who were new to online teaching, expressed surprise at how difficult and time-consuming online teaching was. Anecdotal consensus among experienced faculty members was that they had, over time and with practice, discovered for themselves what worked best for teaching online.

Recently, this author served as a teaching assistant in an online doctoral course and was surprised by a student comment on teaching presence. In one of the course discussions early in the semester, the student shared that the course had more teaching presence in the first few weeks than she normally experienced in an entire semester. That comment led this author to ask questions, talk to other online faculty, and ultimately identify the problem addressed in this paper and the following PICOT question: In nursing faculty teaching online (P), how does an

educational module (I), compared to current practice of no preparation (C), affect knowledge and self-reported use of teaching behaviors associated with teaching presence (O) 8 weeks after the educational module (T)?

Search Strategy and Process

An exhaustive search of the literature related to the research question above was conducted using the following databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), 2005-2015, Education Resource Information Center (ERIC), 2005-2015, Multimedia Educational Resource for Learning and Online Teaching (MERLOT), no year limits, Psychology Information (PsychINFO), 2005-2015, and PubMed, 2005-2015. The keywords and controlled vocabulary terms used to search included: computer-assisted instruction, computer, distance education, faculty, nursing faculty, online, and presence.

Search terms used in CINAHL included both CINAHL headings and text words: faculty, nursing AND teaching methods, and (online OR computer) which yielded a total of 104 results. Search filters applied were English language, humans, all adult age group and articles published in the last 10 years. This new search yielded 9 references which were all manually reviewed. Searches of the databases ERIC and PsycINFO were performed using the same keywords: faculty AND online AND teaching presence. This yielded a total of 30 references in ERIC that were reduced to 19 after limiting the search to the last 10 years and educational level of higher education. The PsychINFO search initially found 19 that decreased to 16 after limiting to only English language, adulthood, human, and the last 10 years. MERLOT is a database of educational resources for learning and online teaching. It was searched using the keywords nursing and online for a yield of 45 references which were all manually reviewed. PubMed was searched using the following Medical Subject Headings (MeSH): computer-assisted instruction

along with education, distance; and faculty, nursing with the Boolean term 'AND' applied. This yielded 72 references which decreased to 38 once the limits English language, and the last 10 years were applied.

The references found in the electronic database search were organized in the reference manager, EndNote®, and duplicates were removed. Each reference was individually critically appraised for appropriateness to the PICOT question. In addition to the electronic databases, the author manually reviewed the reference lists of each relevant article to yield additional studies with valuable and relevant data to support the external evidence and conceptual framework. Roughly 60 research studies and literature reviews were scrutinized and the top 10 research studies with the highest level of evidence and most direct relation to the PICOT question were selected and organized in an evaluation table (Appendix B) and further synthesized and clustered based on similarities in the synthesis table (Appendix C).

Evidence Synthesis

The CoI model is the most frequently cited framework for explaining the online learning experience and provides a method and process for assessing the quality of teaching in online courses (Garrison & Arbaugh, 2007). The Community of Inquiry Survey Instrument (Appendix D) has been used in hundreds of research studies to evaluate the dimensions of the three overlapping presences: social, cognitive, and teaching presence (Arbaugh, et al., 2008). This research instrument is completed by students who rate their perceptions of each of the three types of presence using a 5-point Likert-type scale ranging from one-S*trongly Disagree,* to five-S*trongly Agree*. The 34 item CoI survey instrument assesses teaching presence with 13 items, social presence with 9 items, and cognitive presence with 12 items on the survey. The full CoI instrument has proven reliability and validity (Arbaugh, et al., 2009; Shea & Bidjerano, 2009;

Swan, et al., 2008). The Teaching Presence Scale (TPS) is a subscale of the full CoI instrument and was used in some of the studies evaluated for this evidence synthesis. The TPS is organized according to the three components: Instructional design and organization (6 items); facilitating discourse (8 items); and direct instruction (6 items) (Shea, Li & Pickett, 2006).

Diaz, Swan, Ice, and Kupczynski (2010) studied the importance of each CoI item and found students (*n*=412) rated teaching presence component of the CoI to be more important than both cognitive presence and social presence. Mixed methods research with adult online learners identified the nature of teaching presence as the "catalyst that initiates the community development process" in online courses (Ke, 2010, p. 818) and the key features of teaching presence were found to be supportive of the adult learners' social and cognitive presence (Ke, 2010). Teaching presence was found to foster cognitive presence (Hosler & Arent, 2010) and a study by Shea, et al., (2006) demonstrated that as student teaching presence increased, so did the sense of community among students (Shea, et al., 2006).

A strong correlation was found between teaching presence behaviors and student's sense of cohesion in the online classroom (Sheridan, Kelly & Bentz, 2013), as well as satisfaction in the course (Bangert, 2008; Ke, 2010; Shea, et al., 2003). High levels of satisfaction and learning were found with students who reported that their instructors provided high quality, prompt feedback and clear expectations (Shea, et al., 2001). Consistent with their preliminary study, Shea, Picket and Pelz (2003) found that students reported high levels of satisfaction and learning with all areas of teaching presence, noting the highest ratings in the Design and Organization component. This validated the emphasis of faculty development and preparation in the areas of online instructional design and organization to include setting curriculum, designing methods,

establishing time parameters, utilizing the medium effectively, and establishing netiquette (Shea, et al., 2003).

A synthesis of the evidence on teaching presence in online courses revealed that teaching presence enhanced learning outcomes (Baker, 2010; Hart, 2012; Ivankova, 2005; Jackson, Jones, & Rodriquez, 2010; Shea & Vickers, 2010) and was a significant predictor of students' affective learning, cognition, and motivation (Allen & Seaman, 2015; Baker, 2010; Garrison & Arbough, 2007; Gorsky & Blau, 2009).

Sheridan, Kelly and Bentz (2013) studied students' perceptions of the importance of various indicators of teaching presence and found all components of teaching presence in the CoI framework to be important to students but prioritized them according to the frequency of responses in different constructs (Sheridan, et al., 2013). When students were asked to identify the five most important instructor behaviors for their success in an online class, the most frequent response related to the instructor communicating in a clear and/or timely fashion with students. The next highest response was related to instructor disposition and positive examples given included "understanding, patient, and/or kind, being helpful, having sense of humor, being creative and fun, being fair, and being able to deliver good lectures" (Sheridan, et al., 2013, p.75). Other highly rated teaching presence behaviors listed were feedback; accessibility of materials; clarity in presenting course requirements, due dates or topics in a clear manner; and the desire for the instructor to participate in discussions or facilitation discussions (Sheridan, et al., 2013).

Recommendations in the literature for preparing faculty members to teach online include formal orientation programs, mentors, and ongoing professional development (Baker, 2010; Ray, 2009; Robinia & Anderson, 2010; Sword, 2008). Most of the studies focused on what students

found to be most important in online courses and included recommendations for instructors to improve teaching presence in virtual courses (see the evidence table in Appendix B and the synthesis tables in Appendix C for further details of the studies reviewed).

Conclusions from the Evidence

The body of evidence attests to the importance of teaching presences in online courses. Findings that emerged from the data synthesis confirmed prior studies linking teaching presence in online courses to enhanced student learning outcomes and satisfaction. Conclusions from the data synthesis extend the literature supporting the construct validity of the CoI survey and point to use of the model constructs in developing online courses. In addition, the overall significance of teaching presence was confirmed to support social and cognitive presences and create a community of online learners. Overall, the studies synthesized and presented (see Appendices B and C) confirm the need for faculty preparation to teach online. All studies were found of sufficient strength and quality to provide confidence for developing an evidence-based intervention to enhance online teaching presence behaviors. Overall, the synthesis of the external evidence and recommendations provide the specific and valuable information needed to guide the implementation of the evidence-based project.

Purpose and Rationale

Nurse educators may be experienced and expert clinicians or leaders, and may have earned doctoral degrees, however, they still may not be adequately prepared to facilitate student learning outcomes in an online environment. The purpose of this project was to enhance nurse educators' teaching presence behaviors in online courses. Relevant evidence was appraised and synthesized to develop an online asynchronous educational module on best practices for incorporating teaching presence behaviors.

CHAPTER 2: APPLIED CLINICAL PROJECT: METHODS AND RESULTS

This chapter describes the evidence-based practice model used to guide the DNP project, as well as the setting where the project was implemented. Methods to ensure protection of human subjects and recruit participants will be identified along with details of the educational module intervention, instruments used to collect data, resources needed to complete the project, and methods of data collection and analysis. This chapter will conclude with a discussion of the results and consistency with the current literature.

Theoretical and Evidence-Based Frameworks

Community of Inquiry Framework

The CoI framework developed in the late 1990s by Garrison, Anderson and Archer (2000) provided the theoretical framework for this project. The CoI framework was previously described in this paper (refer back to chapter 1). The value of the CoI framework has been well documented and points specifically to the importance of cultivating teaching presence as it relates to student satisfaction and learning in online education. Teaching presence, along with its three dimensions: design, facilitation, and direct instruction in online courses, provided the focus for this author's evidence-based project.

Model for Evidence-Based Practice Change

An EBP framework is useful in translating and implementing research findings into practice (Gawliski & Rutledge, 2008). The Model for Evidence-Based Practice Change (Larrabee, 2004), a revised version of Rosswurm and Larabee's (1999) model was chosen because of its systematic nature in guiding all phases of an evidence-based practice change, and usefulness in a variety of settings and organizations. This model includes six sequential steps (See Appendix E, Figure 2) similar to the nursing process: assess need for change, link problem

interventions and outcomes, synthesize best evidence, design a practice change, implement and evaluate change in practice, and finally, implement and maintain the practice change for sustainability (Larabee, 2004). Each of these steps will be explained in more detail in the next section as the evidence is operationalized into a proposed practice change.

Application of Evidence to Practice Using EBP Model

The initial step of the Model for Evidence-Based Practice Change was assessing a need for change in practice (Larabee, 2004). This process began as the author gathered anecdotal internal evidence related to the current practice of new and unprepared nurse educators teaching online courses. This was identified as a problem affecting faculty members who were new to online teaching as the primary stakeholders and students enrolled in online courses as additional stakeholders. Internal data was compared to external data and a PICOT question was written to guide the literature search.

Step two of the process involved linking the problem with standardized language to help identify potential interventions and determine outcomes (Larabee, 2004). The PICOT question guided the literature search and relevant sources of evidence. As this problem addressed online education, the CoI framework and definitions provided the standardized language and framework for the project. The intervention involved designing and creating an evidence-based educational module for nurse educators new to online teaching. The overarching desired goals and expected outcomes of the module included increased faculty knowledge related to best practices in enhancing teaching presence as well as an increase in the self-reported frequency of intended use of behaviors associated with teaching presence in their online courses immediately after the completion of the module, and an increase in self-reported actual use of teaching presence behaviors 8 weeks after completing the online educational module. Based on the literature,

another expected outcome of improved teaching presence is enhanced student outcomes related to learning and satisfaction with online nursing courses, however measuring student outcomes was beyond the scope of this project.

Synthesizing the best evidence was the third step in the model for evidence-based change and it included critiquing and weighing the evidence as well as assessing the feasibility and benefits related to it (Larabee, 2004). For this project the internal data was compared to external data and a systematic literature search was done based on the major variables identified in the PICOT question. A critical appraisal, evaluation and synthesis of the best evidence was completed and compiled in the synthesis table (Appendix C). The table includes a list of recommendations for faculty to improve teaching presence. These recommendations were included in the interactive educational module as well as an eight page "tip sheet" that was available to download and print prior to, or immediately after, viewing the online educational module (Refer to Appendix F).

The next step, designing the practice change, began with defining the proposed change to include identifying the resources needed, the implementation plan, and the tools for measuring outcomes (Larabee, 2004). Resources required for implementation included this author's time to develop the content for the proposed educational module, an instructional designer to assist with operationalizing the content into an interactive online module, the College of Nursing Outreach Coordinator's time to assist with obtaining continuing professional education credits for faculty participants in the education, technology support to assist with develop the survey tools to collect and measure outcomes, and data entry and analysis assistance to interpret survey results.

The implementation plan for the evidence-based module was to identify all faculty members who were currently teaching an online course and invite them to participate in the pilot

project by completing the asynchronous online educational module and the accompanying pre- and post-module surveys. Future implementation plans include incorporating the educational module into an orientation program for all new faculty hired to teach online. See additional implementation details under the Procedure section of Project Methods.

The plan for measuring outcomes included developing online surveys with Qualtrics (2014) survey software to be completed by faculty participants prior to, immediately after, and 8 weeks following completion of the educational module. These tools are explained in detail in the upcoming Outcomes Measures section of Project Methods.

The fifth step of this evidence-based practice model was implementing and evaluating the change in practice (Larabee, 2004). This step began with recruiting five faculty volunteers, including experienced content experts, to evaluate the complete educational module and surveys and provide feedback on needed clarifications or modifications. Once this review was completed, the process of implementing the pilot project with faculty members at this organization was begun.

Following the pilot project and completion of any needed revisions, the sixth and final step will involve integrating the educational module into an orientation program for all nurse educators new to online teaching at this organization. The educational module will be available and highly encouraged for existing online faculty, with one continuing professional education credit provided upon completion. The process and outcomes of the education will be monitored with plans to further disseminate the results of the project.

Project Methods

Protection of Human Subjects

The Instructional Review Board (IRB) at Arizona State University granted approval for this project (See Appendix G). A separate IRB for the College of Nursing (CON) where the intervention was to be implemented also granted site approval (See Appendix H). Participants were fellow faculty members of the researcher. Employees are considered a vulnerable research population, therefore safeguards were included to protect the rights and welfare of all participants. Participants were invited to take part in the educational module by the researcher rather than by a director or supervisor. This was intended to avoid employees' perceptions of risks related to job retention or advancement. Participation in the project was strictly voluntary and anonymous, and presented no foreseeable risk of harm.

The survey software, Qualtrics (2014), allowed anonymous collection of data as an added measure to protect the confidentiality and privacy of respondents. Participants were prompted to create a personal identification code (the first two letters of their mother's first name, the two digit number representing their mother's birth month, and their favorite color). This code allowed comparison of pre- and post-module results for each participant.

Informed consent for participation was obtained online prior to each survey. A written description of the study on the consent form included the expected duration of time to complete the online surveys and educational module. The consent process also explained the extent to which their confidentiality would be maintained noting that data would only be reported in aggregate. By clicking the "next" button to start the survey, participants indicated that they had read the description of the study and voluntarily consented to participate in this project.

Setting and Organizational culture

The setting for this intervention was a College of Nursing (CON) at a large four-year Research I public university in the southwestern United States. Nursing programs with online

courses at this CON include the Doctor of Philosophy in Nursing (PhD), Doctor of Nursing Practice (DNP), and Master of Science in Nursing (RN-MSN) programs. The majority of courses in the online programs are totally online (not blended or hybrid), however several courses offer hybrid formats. There are currently no undergraduate nursing courses that are offered completely online at this CON, however plans are underway to convert some undergraduate face-to-face nursing courses to online delivery in the near future.

Academic programs at this CON have been recognized for excellence including identification in the top 15% among Best Graduate Nursing Schools (U.S. News & World Report, 2015). There are over 200 faculty and staff associates, and student enrollments of over 1,000 including 350 in the RN-MSN program, over 300 in the DNP program, and over 80 in the PhD or post-graduate certificate programs.

Participants

The target population for this project included only CON faculty members who had taught at least one prior online course and are currently teaching, or have plans to teach, another completely online course (not blended or hybrid). With the assistance of the division directors at this CON, a total of 64 faculty members were identified who met the inclusion criteria.

Procedure

Recruitment scripts were written for a faculty announcement (See Appendix I) to be read at a faculty meeting in the fall semester and email recruitment scripts to be used to invite faculty members to participate in the project were developed. In October, 2015, each of the 64 faculty members meeting the inclusion criteria were sent an email invitation to participate (See Appendix J), followed by a reminder email invitation (See Appendix K). Participation was explained in the email as completing an online asynchronous education module entitled *Best*

practices for Enhancing Teaching Presence in Online Courses, and estimated to take approximately 30 minutes to complete. It was also explained that before and after the module there was a short quiz as well as a Teaching Presence survey to complete. The estimated total time required to complete the educational module and initial surveys was estimated at approximately 60-70 minutes. Eight weeks following their completion of the module and surveys, faculty members were invited once again to complete a final application survey taking approximately 10 minutes to complete (See Appendix L). Refer to the color-coded project flow chart (Appendix M, Figure 3) which highlights the sequence of events for the project.

Learning Objectives

The learning objectives for the module included the following:

1. Describe the Community of Inquiry (CoI) Framework and its relationship to online teaching and learning
2. Define each of the three types of presence in the CoI Framework
3. Discuss research findings related to teaching presence in online learning
4. Identify best practice examples for each of the three components of teaching presence

The interactive asynchronous online educational module presented an overview of the CoI framework, identifying its usefulness as a model to guide research in online learning or develop an effective and sustained online learning community. The importance of teaching presence was highlighted and supported with a review of research findings related to teaching presence in online courses. Evidence-based, best practice guidelines were presented for each of the three critical roles—design and organization, facilitating discourse, and direct instruction—in creating effective teaching presence in online courses. An eight page "tip sheet" (See Appendix F) was available for participants to download prior to the start of the module and once again

immediately after completing the module. This handout provided all the examples identified in the module along with additional examples, links to videos, or other useful resources to enhance teaching presence in online courses.

Outcome Measures and Data Collection

A pre-module demographic survey (Survey #1, See Appendix N) was developed including questions related to the faculty member's age, degrees earned, graduate degrees in education, number of formal face-to-face courses previously taught, number of formal blended (online and face-to-face) courses previously taught, number of fully online courses previously taught, prior formal education or preparation in online teaching, and prior experience as a student in online courses.

A 10-question pre- and post-test was designed to measure faculty participants' knowledge level before and after the educational module related to teaching presence in online courses (Survey #3 and #4, Appendices P and Q). When any instrument is used to evaluate performance, it is important to ensure the validity and reliability of that instrument (Billings & Halstead, 2016). Validity refers to how well the test measures what it is intended to measure. In order to establish the content validity of the pre- and post-test, the content of each of the questions was designed to carefully align with the instructional objectives of the educational module. The multiple-choice questions were developed with each stem written in positive terms, rather than negative. The four answer options for each question were written so that the correct answer was not obvious and each answer was similar in length. All of the distractors looked to be plausible answers. Once the test was constructed, it was evaluated and confirmed by the panel of experts who reviewed the module and all questions to ensure proper alignment with the objectives.

Reliability refers to "the extent to which an instrument is dependable, precise, predictable and consistent" (Billings & Halstead, 2016, p. 392). No formal or specific tests for reliability of the knowledge test were performed prior to the launch of the pilot project. I It should be noted that the same questions were used for both the pre- and post-test, so participants may have been alerted to the content from the pre-test, or become familiar with the items and more prepared to answer the same questions in the post-test. See more discussion of this in the limitations section at the end of the chapter.

As previously described, the CoI model identifies components of an ideal online educational experience and provides a tool to assess the quality of teaching in online courses (Arbaugh, et al., 2008). The full CoI survey consists of 34 statements for students to rate their perceptions of each of the three types of presence. The student evaluation of each statement is based on a 5-point scale ranging from one-*Strongly Disagree,* to five -*Strongly Agree.* One subscale from the full CoI survey is the 13-item Teaching Presence Scale (TPS) which was developed, researched, and validated as a quantitative tool to measure the three components of teaching presence in online courses: instructional design and organization (6 items); facilitating discourse (8 items); and direct instruction (6 items) (Shea, Picket & Pelz, 2003; Shea, Le, and Picket, 2006). Permission was granted via email from Dr. Randy Garrison to adapt the TPS for use with instructors in order to assess faculty participants' self-reported teaching presence. Three teaching presence surveys were developed specifically for this project based on the TPS and keeping with the five-point rating scale. The Teaching Presence Retrospective-Self Report (TPR-SR) survey (Survey #2, See Appendix O) was developed to be used prior to the educational module to measure instructor participants' current use of teaching presence behaviors in their current online teaching. The Teaching Presence Intent-Self Report (TPI-SR)

survey (Survey #5, See Appendix R) was developed for administration immediately following the educational module to determine the instructor participants' intent to engage in best practices for online teaching presence based on information they received in the intervention. The final survey, the Teaching Presence Application-Self Report (TPA-SR) survey (Survey #6, See Appendix S) was developed for administration 8 weeks after completing the module intervention to measure application of best practices for online teaching presence. In order to obtain information on additional self-reported teaching presence behaviors demonstrated in their most recent online teaching, additional best practice examples identified in the educational module and "tip sheet" (See Appendix F) were added to the TPA-SR s survey with instructions to "select all that apply".

None of the survey instruments used in the project have been previously used in research, therefore, there were no reliability and validity results to report. Contributing to this author's confidence in developing and using tools based on the CoI were the CoI instrument's excellent internal consistency, face validity and construct validity results established in numerous previous studies (Arbaugh, et al., 2009; Shea & Bidjerano, 2009; Swan, et al., 2008). For example, researchers have demonstrated Cronbach's coefficient alphas of .96 to .97 using the full CoI instrument (Bush, et al., 2009; Hosler & Arend, 2012) and .96 to .97 reliability estimates for the teaching presence subscale (Arbaugh, 2007; Diaz, et al., 2010; Shea & Bidjerano, 2009). Reliability coefficients for the Teaching Presence components have been reported as instructional design and organization ($\alpha = .90$ to $\alpha = .97$), facilitating discourse ($\alpha = .93$ to $\alpha = .94$), and direct instruction ($\alpha = .89$) (Arbaugh and Hwang, 2006; Shea et al., 2006).

Project Budget

There was no formal budget available to implement this project. The resources necessary for implementation of this project included this student author's time to review the literature and develop the educational module and surveys, and the time of two CON support staff (one instructional designer who spent approximately 30 hours on the project, and one computer programmer who spent approximately one hour on the continuing education certificate). The CON Office of Professional and Community Engagement provided this support staff time and computer resources. No new or additional resources were needed or purchased to complete the project. Upon completion of this project, the educational module will be included in the CON Continuing Nursing Education online Course Catalog in order to offer this module to members of the community for continuing professional development. The module will also become part of the orientation program for new faculty members teaching online courses at the CON.

Participants in the project were all faculty members currently employed at this organization. Their participation in this project was voluntary, with no additional financial compensation. Those who completed the educational module were offered a certificate with one continuing nursing education credit upon completion of the module and post-module surveys.

Project Results

This project was a pilot evaluation of an evidence-based educational intervention. Five questions were the basis of the evaluation.

1. How did participants' knowledge level change from pretest to posttest?
2. How did prior teaching presence behaviors before the module (TPR-SR) compare to self-reported intent to perform teaching presence behaviors (TPI-SR)
3. How did teaching presence behaviors change over time as self-reported in the TPR-SR survey before compared to the TPA-SR survey after the educational module?

4. How did self-reported frequency of intent to perform teaching presence behaviors following the educational module (TPI-SR) compare to actual teaching presence behaviors reported prior to the module (TPR-SR)?
5. Which additional teaching presence behaviors did participants report demonstrating in their online teaching during the 8 weeks between the educational module and the TPA-SR survey?

Data collection

Survey data were collected online using Qualtrics (2014) software. A total of 20 faculty members (*N*=64, response rate of 31%) participated in some aspect of the project. Eighteen participants completed the pre-module demographics, TPR-SR, pre-test surveys and the educational module. Of those 18 participants, 14 were able to be matched from the 20 participants who completed the post-module TPI-SR survey and post-test. Ten participants completed the 8 week follow-up TPA-SR survey; of those, 9 were positively linked to the pre-module surveys, and 7 were positively linked to all previous surveys based on matching personal identification codes for all three survey events. The personal identification code for one participant on the final TPA-SR survey did not match any other codes on previous surveys, so that case was not included in the final analysis.

Demographics of Entire Sample

All faculty members at this organization who had previously taught online and were currently teaching an online course (*N*=64) were invited to participate in this project. Of the 18 respondents who completed the demographic survey, 6 (33%) were between the ages of 45-54 years, 10 (56%) were between 55-64 years, and 2 (11%) participants were 65 years of age or older. The educational degrees earned by the participants included Master of Science (MS) *(n*=6,

33%), Master of Science in Nursing (MSN) (*n*=9, 50%), Doctor of Nursing Practice (DNP) (*n*=4, 22%), Doctor of Philosophy (PhD)(*n*=9, 50%), Masters Business Administration (MBA) (*n*=1, 6%), and Masters in Public Health (MPH) (*n*=1, 6%). In addition, 2 participants (11%) also have graduate degrees in education. Several of the participants reported more than one graduate degree.

Prior teaching experience with face-to-face courses ranged from no prior experience (*n*=3, 17%), to teaching 1-3 courses (*n* =4, 22%), 4-6 courses (*n* =2, 11%), or more than 10 courses (*n* =9, 50%). Prior teaching experience in formal blended courses (includes online and face-to-face courses), were identified as no prior experience (*n* =5, 28%), 1-3 courses (*n* =3, 17%), 4-6 courses (*n* =3, 15%), 7-10 courses (*n* =1, 6%), and more than 10 blended courses taught in the past (*n* =6, 33%). All survey participants had taught fully online courses in the past with the number of prior online courses taught ranging from 1-3 courses (*n* =5, 28%), 4-6 courses (*n* =3, 17%), 7-10 courses (*n* =2, 11%), and more than 10 online courses (*n* =8, 44%). Half of the participants (*n* =9) have been students in formal online education programs in the past, with 3 years as the average length of their programs. The participants identified their prior preparation for online teaching as informal self-study (*n* =7, 39%), on-the-job training (*n* =12, 67%), mentoring (*n* =11, 61%), continuing education program (*n* =7, 39%), educational conference (*n* =1, 6%), online teaching training program (*n* =4, 22%), graduate program education (*n* =4, 22%), and no specific training (*n* =4, 22%).

Half of the participants (*n* =9) have been a student in a formal online education program in the past, with 3 years as the average length of their program. The participants identified their prior preparation for online teaching as the following: informal self-study (*n* =7, 39%), on-the-job training (*n* =12, 67%), mentoring (*n* =11, 61%), continuing education program (*n* =7, 39%),

educational conference (*n* =1, 6%), online teaching training program (*n* =4, 22%), graduate program education (*n* =4, 22%), and no specific training (*n* =4, 22%).

Current teaching roles and responsibilities of the participants were identified as either leader faculty/course chairperson (*n* =16, 89%), or section faculty/teaching team member (*n* =2, 11%). The majority of participants (*n* =16, 89%) have prior experience developing a course in the following formats: online (*n* =15, 94%), blended (*n* =10, 63%), or face-to-face (*n* =12, 75%).

Demographic Data of Subsample

The demographics data is further drilled down to include only the subsample (*n* =7) who completed the entire project and all surveys. The ages of the subsample were 45-54 years (*n* =2, 29%), 55-64 years (*n* =4, 57%) and 65 years and above (*n* =1, 14%). Educational degrees ranged from MS (*n* =3, 43%), MSN (*n* =2, 29%), DNP (*n* =1, 14%), PhD (*n* =4, 57%), MPH (*n* =1, 14%). In addition, 1 participant in the subsample (14%) also had a graduate degree in education.

Prior teaching experience in formal face-to-face courses in the past by the subsample included equal numbers of participants (*n* =2, 29%) in three categories, no experience, 4-6 courses, and more than 10 face-to-face courses in the past. One participant (14%) indicated experience with 1-3 face-to-face courses. The majority of the subsample had no prior experience teaching blended courses (*n* =4, 57%), however 2 participants (29%) had taught 1-3 blended courses, and 1 participant (14%) had taught 4-6 blended courses in the past. Prior experience teaching fully online formal courses ranged from 1-3 courses (*n* =1, 14%), 4-6 courses (*n* =2, 29%), 7-10 courses (*n* =1, 14%), and more than 10 courses (*n* =2, 29%).

Similar to the overall participant sample, nearly half of the subsample (*n* =3, 43%) had been online students themselves in the past for an average of 3.5 years in their programs. Nearly

half of the subsample (*n* =3, 43%) identified no specific training in preparation to teach online, while the remainder acknowledged training as informal self-study (*n* =4, 57%), on-the-job training (*n* =5, 71%), mentoring (*n* =6, 86%), continuing education program (*n* =2, 29%), online teaching training program (*n* =1, 14%), and graduate program education (*n* =1, 14%).

The vast majority of the subsample (*n* =6, 86%) are currently lead faculty members or course chairpersons, while the remaining participant is a section faculty or teaching team member. Five participants (71%) have developed an online course in the past, one participant (14%) has developed a blended course, and 3 participants (43%) have developed at least one face-to-face course in the past.

Data Analysis and Findings

SPSS statistics software (version 23) was used to perform all statistical analyses. Because of the small sample size, the nonparametric alternative to the paired samples *t*-test, the Wilcoxon matched-pairs signed ranks test, was used to analyze all the data. The three assumptions required for using a Wilcoxon signed-rank test were met: 1) the data analyzed was continuous and at the ordinal level, 2) the independent variable consisted of matched pairs, meaning that the same subjects were present in both groups and measured on two occasions with the same dependent variable, and 3) the total sample size is more than five pairs (Kellar & Kelvin, 2013).

Results

1. How Did Knowledge Change?

A sample of 14 participants completed the pre- and post-test and could be positively matched by identification codes. The pre-test score results were compared to the post-test score results in order to determine if there was a change in the test scores from before the module to

after. Pre-test scores ranged from 1 to 9 points out of 10. Post-test scores ranged from 5 to 10 out of 10. The findings indicated that the post-test scores (Mdn= 7, *SD*=1.406) were statistically significantly higher (z= -3.132, p<.002) than the pre-test scores (Mdn=4, *SD*=2.176).

2. How Did Prior Teaching Presence Compare to Teaching Presence Intent?

In order to evaluate if there was a change in self-reported frequency of intent to perform teaching presence behaviors following the educational module, the Wilcoxon signed ranks test was used to compare the results from the Teaching Presence Retrospective-Self Report (TPR-SR), completed prior to the module to the Teaching Presence Intent-Self Report (TPI-SR) survey which was completed immediately after the module. A scale of 0 to 5 was used with 0=None Applicable, 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Frequently, 5 = Always. In comparing the median scores on the TPR-SR to the TPI-SR, the following 6 items in the instrument were found to be statistically significant: Question 1: *Clearly communicate important course topics* (z= -2.00, p<.046), Question 5: *Identify areas of agreement and disagreement among students on course topics* (z= -2.99, p<.003), Question 6: *Help guide the class towards understanding course topics* (z= -2.449, p<.14), Question 7: *Help keep course participants engaged and participating in productive dialogue* (z= -2.449, p<.14), Question 10: *Reinforce the development of a sense of community among course participants* (z= -2.530, p<.011), and lastly, Question 11: *Help focus discussion on relevant issues* (z= -2.333, p<.020). The statistically significant negative z statistic for each of these items identified indicates that reported retrospective scores were lower than intended teaching presence behaviors. Refer to Table 1 for all of the results.

Table 1

Comparison between Teaching Presence Retrospective-Self Report (TPR-SR) and Teaching Presence Intent-Self Report (TPI-SR)

	TPR-SR	TPI-SR	*z*	*p*

	Median	Median	Score	value
Question 1: Clearly communicate important course topics	5.00	5.00	-2.00	.046*
Question 2: Clearly communicate important course goals	5.00	5.00	-1.63	.102
Question 3: Provide clear instructions on how to participate in course learning activities	4.50	5.00	-1.89	.059
Question 4: Clearly communicate important due dates/time frames for learning activities	5.00	5.00	-1.41	.157
Question 5: Identify areas of agreement and disagreement among students on course topics	3.00	4.00	-2.99	.003*
Question 6: Help guide the class towards understanding course topics	4.50	5.00	-2.449	.014*
Question 7: Help keep course participants engaged and participating in productive dialogue	4.00	5.00	-2.449	.014*
Question 8: Help keep course participants on task	4.00	5.00	-1.890	.059
Question 9: Encourage course participants to explore new concepts in the course	4.50	5.00	-1.000	.317
Question 10: Reinforce the development of a sense of community among course participants	4.00	5.00	-2.530	.011*
Question 11: Help focus discussion on relevant issues	4.00	5.00	-2.333	.020*
Question 12: Provide feedback that helps students understand their strengths and weaknesses	4.50	5.00	-1.518	.129
Question 13: Provide feedback in a timely fashion	4.00	5.00	-1.897	.058

Note: *= $p<.05$

3. How Did Teaching Presence Behaviors Change Over Time?

The Teaching Presence Application-Self Report (TPR-SR), was completed 8 weeks after the educational module to measure the frequency of best practices for online teaching presence. The Wilcoxon matched-pairs signed ranks test was also used to compare the frequency of current teaching presence behavior reported in the TPA-SR to the Teaching Presence Retrospective-Self

Report (TPR-SR) completed just prior to the module. Both surveys have identical items and only the titles were changed for clarity in reporting results. See Table 2 for medians and *p*-values. No significant differences were seen in the median scores of self-reported teaching presence behaviors before, as compared to 8 weeks after, completing the educational module.

Table 2

Comparison between Teaching Presence Retrospective-Self Report (TPR-SR) and Teaching Presence Application-Self Report (TPA-SR)

	TPR-SR Median	TPA-SR Median	*z* score	*p* value
Question 1: I clearly communicated important course topics	5.00	5.00	-.577	.564
Question 2: I clearly communicated important course goals	5.00	5.00	-.378	.705
Question 3: I provided clear instructions on how to participate in course learning activities	4.50	4.00	-.447	.655
Question 4: I clearly communicated important due dates/time frames for learning activities	5.00	5.00	-.577	.564
Question 5: I identified areas of agreement and disagreement among students on course topics	3.00	4.00	-1.65	.098
Question 6: I helped guide the class towards understanding course topics	4.50	5.00	-1.342	.180
Question 7: I helped keep course participants engaged and participating in productive dialogue	4.00	4.00	.000	1.00
Question 8: I helped keep course participants on task	4.00	5.00	-.632	.527
Question 9: I encouraged course participants to explore new concepts in the course	4.50	4.50	-.447	.655
Question 10: I reinforced the development of a sense of community among course participants	4.00	4.00	-.447	.655
Question 11: I helped focus discussion on relevant issues	4.00	4.00	.000	1.00
Question 12: I provided feedback that helps students understand their strengths and weaknesses	4.50	5.00	-.707	.480

Question 13: I provided feedback in a timely fashion	4.00	5.00	-1.0	.317

Note: *=p<.05

4. How Did Intent Compare to Actual Teaching Presence Behaviors?

To evaluate for changes in self-reported frequency of teaching presence behaviors (TPA-SR) 8 weeks following the module compared to the participants' intent to perform teaching presence behaviors following the educational module (TPI-SR), the Wilcoxon signed ranks test was used. Of the 13 evaluation questions, one item was found to be statistically significant at the .05 level (p = .046): *Reinforce the development of a sense of community among course participants*. The median score for this item on the TPI-SR was 5 (*Always*), while the median score of their actual application of this behavior was 4 (*Frequently*).

Table 3

Comparison between Teaching Presence Intent-Self Report (TPI-SR) and Teaching Presence Application-Self Report (TPA-SR)

	TPI-SR Median	TPA-SR Median	*z* score	*p value*
Question 1: Clearly communicate important course topics	5.00	5.00	.000	1.00
Question 2: Clearly communicate important course goals	5.00	5.00	-1.00	.317
Question 3: Provide clear instructions on how to participate in course learning activities	5.00	4.00	-1.732	.083
Question 4: Clearly communicate important due dates/time frames for learning activities	5.00	5.00	.000	1.00
Question 5: Identify areas of agreement and disagreement among students on course topics	4.00	4.00	.000	1.00
Question 6: Help guide the class towards understanding course topics	5.00	5.00	-1.00	.317
Question 7: Help keep course participants engaged and participating in productive dialogue	5.00	4.00	-1.342	.180

Question 8: Help keep course participants on task	5.00	5.00	-.447	.655
Question 9: Encourage course participants to explore new concepts in the course	5.00	4.50	.000	1.000
Question 10: Reinforce the development of a sense of community among course participants	5.00	4.00	-2.00	.046*
Question 11: Help focus discussion on relevant issues	5.00	4.00	-.707	.480
Question 12: Provide feedback that helps students understand their strengths and weaknesses	5.00	5.00	-.577	.564
Question 13: Provide feedback in a timely fashion	5.00	5.00	-1.00	.317

Note: *=$p<.05$

5. Which Additional Teaching Presence Behaviors Were Demonstrated?

Table 4 highlights the additional teaching presence behaviors reported during the 8 weeks following the module in the final TPA-SR survey. This data was manually counted from the Qualtrics (2014) database as only participants who completed the TPR-SR and the TPA-SR were included in this analysis (n=9). In addition to the items identified in Table 4, one participant reported 2 virtual office hours each week using Adobe Connect.

Table 4

Additional Teaching Presence Reported in Online Teaching 8 Weeks After Module

Behavior	Responses	% Reporting
Design course for easy navigation	6	67%
Send welcome email to students	8	89%
Record introductory video to introduce yourself and the course	4	44%
Provide online resources	8	89%
Include planned synchronous activities	5	56%
Ensure course contains detailed orientation	7	78%

Include relevant assignments with rubrics and samples	8	89%
Clearly communicate course topics and goals	8	89%
Clearly communicate course requirements	9	100%
Clearly communicate how to participate in discussions and all learning activities	9	100%
Clearly communicate all due dates	9	100%
Set the climate for learning to foster development of a sense of community	9	100%
Ice breaker or "getting-to-know-each-other" forum for students to introduce themselves, find commonalities, and build relationships	6	67%
Encourage students to be comfortable participating	7	78%
Respond to student questions or needs	9	100%
Establish netiquette	8	89%
Use announcements frequently	8	89%
Introduce each week or new module with an overview	6	67%
Send reminders of upcoming activities or due dates	5	56%
Keep course calendar updated	6	67%
Provide useful information from a variety of sources	8	89%
Give fair individual attention and feedback	9	100%
Encourage, acknowledge, and reinforce student contributions	9	100%
Identify areas of agreement and disagreement in discussions	8	89%
Draw in participants and prompt discussions	5	56%
Model asking questions in discussion	4	44%
Help focus discussion on relevant issues	7	78%

Help keep students engaged in productive dialog and on task	8	89%
Encourage exploring new concepts in the course ("think out loud")	7	78%
Tie discussions and follow-up learning activities together	7	78%
Summarize discussion	7	78%

Discussion

The focus of this pilot project was to examine if an educational module on best practices to enhance teaching presence in online courses would lead to a difference in nurse educators' self-reported teaching presence behaviors. Based on the results of this pilot project, it appeared that there was no significant change in the frequency of teaching presence behaviors 8 weeks after completion of the educational module.

There was a statistically significant increase in the participants' intent to perform 6 of the teaching presence behaviors following the educational module, with the most significant change noted in the item: *Identify areas of agreement and disagreement among students on course topics*. Of note, this was the item with the overall lowest reported behavior retrospectively as well as the lowest rated intent. The one item for which participants reported a higher intention than they actually performed was *Reinforce development of a sense of community among course participant*s.

Overall, the self-reported scores for each of the behaviors in the TPR-SR completed prior to the module were already in the high range. Of the 13 items, 3 items had median scores of 5 indicating the faculty members *Always* performed the teaching presence behavior in prior online teaching. Five items had median scores of 4 indicating *Frequently,* and 4 items fell between *Always and Frequently* categories with median scores of 4.5. Only 1 item had a median score of

3 representing *Sometimes.* The already high self-reported teaching presence scores prior to the module may indicate less perceived room for improvement in this group of experienced instructors.

The final TPA-SR survey also included a list of teaching presence behaviors found in the literature to be important to student success and motivation in online courses. These behaviors were not part of the 13 item adapted teaching presence surveys, however based on the frequency of self-reported use of these additional behaviors in this pilot project, it could be suggested that teaching presence is a broader construct that encompasses a larger set of behaviors than those identified on the TPS instrument.

Limitations

As with all projects, there are limitations. Because the subsample in this project was small (n=7), the low statistical power decreases the chances of identifying a true effect of the educational module, limits conclusions that can be drawn, and weakens the overall reliability of the results. In addition to limiting the power of the study, the sample size was also too small for standard test reliability measures for the pre- and post-test. The two tests had identical questions, which may have resulted in participants being alerted to the test content they were reviewing in the module. Future use of this evaluation method may include rewriting the post-test questions to ensure that the content is tested with similar, but not identical, questions. In that case, the same level of difficulty would be maintained, with items differing only in the wording of the questions. Another option would be to change the order of the response alternatives, which was not done in this pilot, but could potentially reduce any practice effect acquired from answering the identical questions previously.

Moreover, the number of participants who did not complete the entire project, or could not be positively matched between the 3 separate survey administration times, was another limitation. The personal identification codes were made by the participants each answering three questions (first two initials of mother's first name, two digits of mother's birth month, and favorite color). This proved to be problematic when not all codes could be matched between surveys and led to participant results being eliminated from analysis. The anonymous survey with no other methods to match participants between the three surveys limited the sample size.

Another limitation of the project was the use of teaching presence surveys (TPR-SR, TPI-SR, and TPA-SR) that were developed specifically for this project and not previously used or validated. This was the first known project to use these three teaching presence surveys to evaluate instructors' self-reported teaching presence behaviors over time, as well as measure their intent and actual follow through in performing teaching presence behaviors following the educational module. These surveys were adapted from the Teaching Presence Scale (TPS) instrument that has demonstrated validity and reliability previously in large studies (Shea, Picket & Pelz, 2003; Shea, et al., 2006). Additional studies with larger sample sizes may seek reliability and validity confirmation of the adapted surveys.

Lastly, the methodological limitations associated with potential self-report response bias is acknowledged. Social desirability is viewed as "the tendency on behalf of the subjects to deny socially undesirable traits and to claim socially desirable ones, and the tendency to say things which places the speaker in a favorable light" (Nederhof, 1985, p. 264.). Thomas and Kilmann (1975) studied the social desirability variable with self-reported behavior and found that participants' self-reported ratings of behaviors were strongly correlated with the social desirability of the behavior being measured (Thomas & Kilmann, 1975). The educational

module in this pilot project was titled, *Best Practices in Enhancing Teaching Presence in Online Courses.* This title alone may have signaled participants to the "social desirability" of teaching presence behaviors, and therefore, could potentially be a source of bias as participants may tend to want to respond to survey items in a way that makes them look as favorable as possible (Donaldson & Grant-Vallone, 2002).

Future Research

Future studies using the adapted surveys from this pilot project might also be expanded to include use of the TPS administered to students and comparisons of students' evaluations of their instructors' teaching presence to the instructors' self-evaluations. Continued studies to identify additional methods to enhance teaching presence or evaluate changes in instructor teaching presence are encouraged to strengthen communities of inquiry in online learning.

CHAPTER 3: ORGANIZATIONAL/HEALTH POLICY IMPACT AND SUSTAINABILITY

The purpose of the chapter is to discuss the impact of this pilot project within this organization, as well as implications in terms of leadership, financial costs, and sustainability. Gaps that were identified will be reviewed. The chapter will conclude with the plan and recommendations for future application of the educational module.

Project Impact

It is difficult to measure the overall impact of this pilot project with the faculty and students of this organization. No significant differences were found in the self-reported teaching presence behaviors 8 weeks after completing the educational module in the small sample who participated in this pilot project, however, the initiative led to changes in the organizational environment. The module developed in this project will become a part of the orientation program for future CON faculty members teaching online. Other organizations may consider using the online educational module as it will now be available for community members to view for continuing professional education credit. Organizations that employ faculty members who have not had prior formal education for online teaching may choose to use this as a resource to develop their online faculty members. The "tip sheet" of best practices for enhancing teaching presence in online courses may be used as a reference by faculty members who completed the module to influence their teaching presence behaviors in the future.

Leadership Implication

Some impacts of this project are not easily measureable. For instance, there were personal impacts for this author associated with the visibility of the project related to online learning. Faculty colleagues and leaders of this organization may now view this author as one with expertise in online education and continuing education development. The project could

potentially open up new possibilities for innovation, influence or leadership in nursing academic settings.

This author developed increased collaboration and networking skills, embracing the challenges that came with working in partnership with many different people to complete this project. The author served as the subject matter expert and developed the evidence-based content for the module. The instructional designer who completed the software programming for the online interactive educational module was very responsive to changes or editing required throughout the design and development of the project. The unit's Information Technology Manager created the online link for the educational module, and an administrative associate provided the link for the continuing professional education credit and certificate of completion. The College of Nursing Outreach Coordinator assisted with the process of obtaining continuing professional education credits for faculty participants. The process of applying for and receiving the continuing professional education took longer than anticipated, resulting in a minor delay in starting the project with faculty participants.

Financial Implications

According to research data compiled by Chapman Alliance (2010) the average cost per finished hour of an instructor led online module is equal to $5,934. That figure represents time spent by all members of the team including the writers, instructional designers, and subject matter experts throughout the entire development process. The resources used to develop this project included this student author's time, estimated at roughly 120 hours to review and compile the literature, create the content for the educational module, write the tip sheet and develop all surveys. Two CON support staff members also contributed their time and expertise to the project. One instructional designer spent approximately 40 hours on the project, and one

computer programmer spent approximately one hour answering questions related to the survey software and to managing the continuing education certificate. The support of these two staff members was provided by the CON Office of Professional and Community Engagement at no cost to the author. The time spent by subject matter experts reviewing content was roughly estimated as 15 hours. The time of professors supervising and providing statistical consultation as part of a doctoral project requirement was not included in the figure. In all, the estimated cost of creating the module and getting all the required approvals and reviews for the continuing education credit would equate to roughly $5,740. No new or additional resources were purchased to complete the project.

Policy Impact and Sustainability

The educational module will be available for use as part of the orientation program for new faculty members teaching online courses at the CON. There is no written policy requiring new or current employees to view the module at this time, however supervising faculty coordinators have been made aware of the availability of the module and have expressed interested in encouraging its use with new and current online faculty members. This educational module will also be included in the CON Continuing Nursing Education online Course Catalog in order to offer it to members of the community for continuing professional development for a fee. No additional resources are anticipated to sustain this educational module for use in the immediate future, however updates to the module content may eventually be needed as evidence in online teaching presence evolves.

Gaps Identified and Implications for further Application

There is a wealth of research on the topic of online education and the Community of Inquiry framework for online learning environments. Future educational modules on enhancing

social presence or cognitive presence could be developed that would complement this teaching presence module and create a comprehensive educational experience related to the Community of Inquiry framework for nursing faculty members teaching online courses.

In addition to the educational module being used for new faculty orientation, this module will provide for ongoing continuing professional development of experienced online faculty, consistent with the literature noting a gap in faculty development in this area and a desire for ongoing support (Kosak et al., 2004; Ray, 2009). Ultimately, there is potential for enhanced student outcomes and satisfaction in all online courses at this CON as faculty incorporate pedagogically sound educational strategies and modalities enhancing online teaching presence.

Conclusion

The purpose of this project was to enhance nurse educators' teaching presence behaviors in online courses. Relevant evidence was appraised and synthesized to develop an online asynchronous educational module on best practices for incorporating teaching presence behaviors.

As the most widely quoted research theory in online learning, the CoI framework provides valuable insight into the behaviors that support a positive online educational experience (Garrison, Anderson, & Archer, 2000). Teaching presence and its inherent critical components of instructional design and organization, facilitation of discourse, and direct instruction (Garrison & Arbaugh, 2007) are critical in facilitating success in online education. The translation of research findings into an educational module addressed the lack of formal faculty preparation for online teaching in this setting. Prior research reported the teaching presence component was a significant predictor of students' affective learning, cognition, and motivation and the prime catalyst for establishing and maintaining both social and cognitive presence. The external

evidence provided the focus for a literature search that ultimately pointed to the need for educator preparation and resulted in this evidence-based pilot project.

The interactive educational module on teaching presence was pilot tested with nursing faculty members who had taught at least one online course previously and were currently teaching an online course. This was the first known project to use the Teaching Presence Surveys (TPR-SR, TPI-SR, and TPA- SR) to evaluate instructors' self-reported teaching presence behaviors over time, as well as their intent and actual follow-through in performing teaching presence behaviors after the educational module. Despite the statistically significant higher levels of participants' intent to perform 6 of the teaching presence behaviors following the educational module, there was no significant change in the frequency of teaching presence behaviors self-reported by participants 8 weeks after completion of the educational module. Overall, the self-reported scores for each of the teaching presence behaviors on the surveys was in the high range, offering little perceived room for improvement in this group of experienced instructors.

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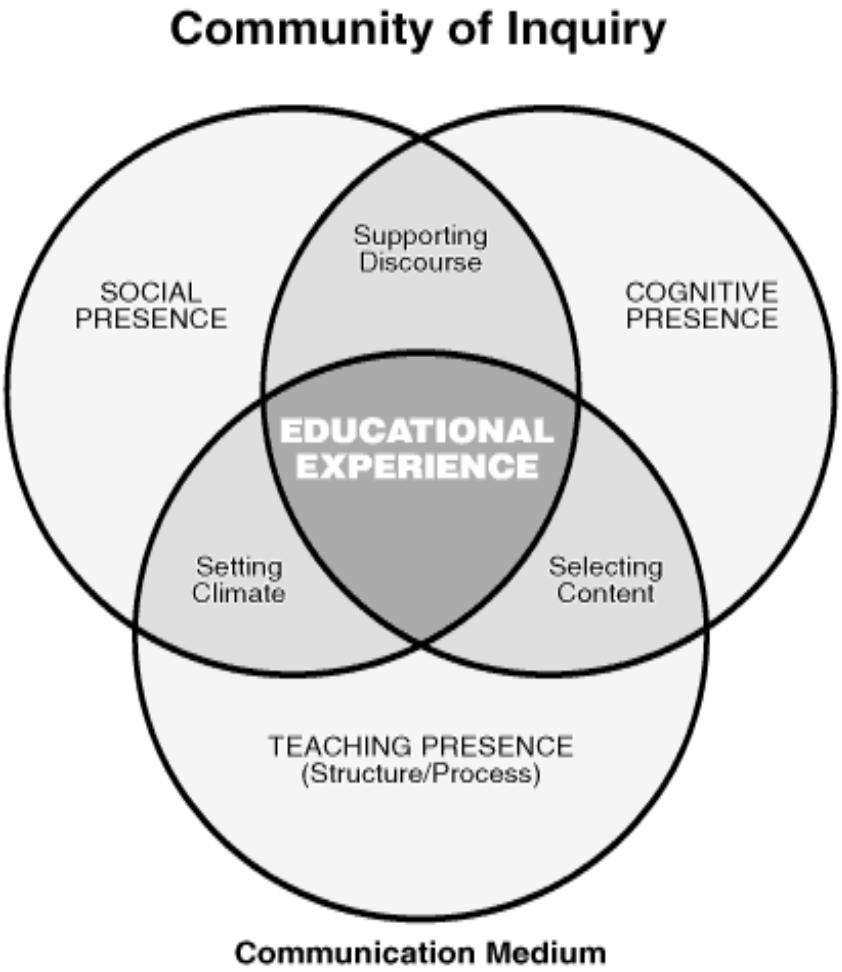
Appendix A

Figure 1. Community of Inquire Model Diagram



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Appendix B

Evaluation Table

Citation	Conceptual Framework	Design/Method	Sample/Setting	Major Variables & Definitions	Measurement of Data and Instrument Validity	Data Analysis	Study Findings	Decision for Use in Practice
Baker, C. (2010). The impact of instructor immediacy and presence for online student affective learning, cognition, and motivation. Journal of educators online **Funding:** no information given **Conflicts or Bias:** none apparent **Country:** USA	Transaction al distance theory (Moore & Kearsley, 1996) and Concept of communica-iton immediacy. (Mehrabian, 1971)	**Design:** Empirical and quantitative methods **Purpose:** Explore II & IP in an OL learning environment in relation to STU AL, COG, MOT	**Sample & Demographics:** N=699 STUs n=377 STUs completed surveys (54% RR) 70.3% (n=265) FG 29.7% (n=112) MG 18.8% (n=71) 1st OL course 81.2% (n=306) previous OL experience 37.5% (n=141) GS 62.5% (n=236) UGS **Inclusion criteria:** UGSs or GSs in 10-week OL summer 2008 semester courses asked to participate in voluntary survey **Exclusion criteria:** N/A- only those eligible were asked to volunteer **Attrition rate:** N/A, only a one-time survey	**Definitions:** II=INSTR interaction PRES="visibility" of INSTR perceived by STU **Variables:** - PV1-II - PV2-IP - CV1 -STU AL - CV2-STU COG - CV3-STU MOT **Res. Questions:** 1. Is there sig. correlation b/w perceived II and perceived IP in OL classes? 2. Will II & IP explain sig. Variance in STU affective learning in OL classes? 3. Will II & IP explain significant variance in STU cognition in OL classes? 4. Will II & IP explain sign. variance in STU motivation OL classes? 5. & 6 not related to my PICOT	**5 instruments:** **II – The Verbal Immediacy Scale** - 17 item Likert-type scale (reliability coefficients ranging from .77-.94 and α ranges from .84-.90 in previous studies) **IP – The Teaching Presence Scale** – 7-point scale from *SA* to *SDis* (reliability coefficients .98, .97 & .93 in one study, another study established construct validity with coefficients of .90, .94, and .89. F/u study reported Cronbach alpha of .97) **AL-Six-Scale Measure of AL on continuum.** (report prior study split-half reliability of .98, other studies used scale with reliability scores ranging b/w .82 and .98) **COG-Learning Loss Scale** (reports mod. Strong (r=-.50, ;<.001) indications of concurrent validity) **MOT-Motivation Scale** Data collected from a single-administered OL instrument during the 7th week of a 10-week OL	RQ1- Bivariate correlation analysis to test r/s b/w II and IP and measure magnitude of any possible connection. RQs 2,3,4 – Multiple regression analysis to determine degree to with PVs might explain variance in AL, COG, & MOT RQs 5 & 6 – factoral ANOVA to evaluate if any evidence that means reported II differ by demographic data (not part of my PICOT) Boneffoni Procedure used to control for overall Type I error	**Major Finding:** IP found to be sig. predictor of AL, COG, and MOT (but II was not sig. predictor). Noted that IP was broader construct with more ways of influencing STU AL than II. Found stat. sig. + r/s b/w II & IP **Other Findings:** Linear combination of II and IP is a stat. sig. **predictor** of STU AL (56% of variance accounted for by linear combo), COG (46%), & MOT (38%). +correlation b/w the following: II and STU AL. II and STU COG, II and STU MOT STUs in asynchronous courses reporting sig. lower IP, and STU in synchronous courses reporting sig. higher IP	**Level of evidence:** VI low level- because Descriptive, correlational, no randomization **Limitations:** - Random selection and assignment not used. - Self-reporting nature of measurement instrument hinders ability to control errors and bias in participant responses. **Strengths/Application to Practice:** - Support other studies that TP impacts STU AL, COG, and MOT, supporting need for TNG FAC to ↑ IP in OL courses - Suggestions to establish IP-methodical design prior to course onset, engage STUs through productive discourse & direction, identify areas of agreement and disagreement, seek to reach consensus & understanding, encourage, acknowledge, reinforce STU contributions, set climate for learning, draw in participants, present content & questions, focus D on specific issues, prompt D, and assess efficacy of process, summarize D, confirm understanding, Dx misperceptions, inject knowledge from diverse sources, respond to STUs TECH concerns, establish "netiquette" prior to course starting. - Synchronous courses increased IP over asynchronous TP Tool has strong Cronbach's

ADV – advantages, **AL-**affective learning, ***α*-**alpha, **b/w-**between, **CC-**community college, **CFA-**confirmatory factor analysis, **CK-**Cohen's kappa, **CMS-**course management system, **CoI-**Community of Inquiry, **COG-**cognition, **CP-**cognitive presence, **CT-**communication timeliness, **CV-**criterion variable, **D-**discussion, **DF-**discussion forum, **DISADV-**disadvantages, **DV-**dependent variable, **Dx-**diagnose, **ED-** education, **EFA-**exploratory factory analysis, **F2F-**face-to-face, **FA-** factor analysis **FAC-**faculty, **FB-**feedback, **FG-**female gender, **f/u-**follow up, **GS-**graduate student, **HE-**higher education, **HC-** Holsti's coefficient of reliability, **HSD-**Tukey's honesty significant difference, **ID-**instructional designer, **II-**instructor immediacy, **impt** – important, **INST** – institution, **INSTR-**instructor, **IP-**instructor presence **IR-**inter-rater, **IV-**Independent variable, **M-**mean, **MG-**male gender, **MOT-** motivation, **MULT-**multiplicative, **η^2-**eta squared**, N-**population size, **n-**sample size, **NE-**nurse educator, **neg-**negotiated, **OL-**online, ***p*-*p*-**value of computed statistic, **PED-**pedagogical, **PRES-**presence, **PV-**predictor variable, **RCT-**randomized controlled trial, **RES-**research, **RQ-**research question, **RR**=Response rate, **r/s-**relationship, **satis.-**satisfaction, **SA-**strongly agree, **SD-**standard deviation, **SDis-** strongly disagree, **SE-**self-efficacy, **sig.-**significant, **SP-**social presence, **stat**.-statistical or statistically. **STU-**student, **TECH-**technological, **TP-**teaching presence, **TPS-**teaching presence survey, **TNG-**training, **TT-**t-test, **UGS-**undergraduate student, **UNIV-**university, **US-**United States

Citation	Conceptual Framework	Design/Method	Sample/Setting	Major Variables & Definitions	Measurement of Data and Instrument Validity	Data Analysis	Study Findings	Decision for Use in Practice
					course (reported Cronbach's alpha of .95).			alpha of .97 and strong reliability coefficients (measures internal consistency) **Application to my PICOT**
Bush, R. et al., (2010) The importance of teaching presence in online and hybrid classrooms **Funding:** no information given **Conflicts or Bias:** none apparent **Country:** USA	CoI model	**Design:** Quantitative Survey **Purpose:** Determine the extent to which the CoI model distinctly exists in blended and OL courses in a university setting **Goal**: provide recommendations INSTRs can use to improve TP in virtual classrooms	**Sample:** n=97 students enrolled in blended and OL courses (no info given on # student invited for determination of RR) Lawrence Technological University **Demographics:** 65% (n=64) male 50% (n=47) undergrads 27% (n=26) OL-only 59% (n=58) blended-only **Setting and Inclusion criteria:** Fall semester 2007, students invited to voluntarily participate **Exclusion criteria:** None identified **Attrition rate:** No information	**Research Questions:** To what extent does social, COG and TPs relate to demographic characteristics (gender, age, degree status)? To what extent does the relationship between social, COG and TPs support OL and blended communities of inquiry? To what extent does the r/s b/w TP (instructor interaction) and STU satisfaction exist in an OL and blended COI model?	50 item web-based survey with: 16 items demographic info 34 items from CoI survey (using 5-point Likert scale from SDis=1 to SA=5: TP -13 items SP - 9 items CP - 12 items CoI items - reliability testing and assessment of internal consistency (Cronbach's alpha), face-validity, and construct validity via EFA & CFA. Excellent internal consistency for full COI model (α= .974)	**Stats used:** First- and second-order factor analysis & ANOVA EFA conducted in SPSS using principle axis factoring as extraction method, followed by direct oblimin rotation CFA was conducted in Mplus using maximum likelihood estimation. SPSS for ANOVA to examine the connection between CoI dimensions, learning context, student satisfaction, and knowledge in OL courses. Focus on the impact of the TP dimension.	**ANOVA:** - TP significantly related to course satisfaction and course knowledge. Participants satisfied with both course and knowledge perceived high levels TP ($p<.01$ ANOVA). - STU dissatisfied with course and knowledge perceived low TP ($p<.01$ ANOVA). **Results:** - TP needs to be increased in OL and blended courses. - STU satisfaction can be enhanced by improving TP - STUs may exhibit significant gains in the learning when relevant teaching techniques and interactions are effectively applied by the INSTR	**Level of evidence:** VI **Strengths:** CoI model had good psychometric properties in sample Excellent internal consistency for full CoI model. Application to my PICOT **Limitations:** Not sure if study peer reviewed – was paper presented at Academy of Educational Leadership **Application to practice and Recommendations relevant to DNP project:** TP in OL course is important factor for sustaining both STU satisfaction and knowledge and should be increased in OL and blended courses. Recommendations to offer FAC education and TNG related to SP, CP & TP with focus on improving teaching performance. FAC develop interventions aimed at improving TP and ultimately student satisfaction TP crucial to establishing a learning environment that will allow the SP & CP to take shape and create a community where learning can be effective.

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Diaz, S. R. et al. (2010) Student ratings of the importance of survey items, multiplicative factor analysis, and the validity of the community of inquiry survey **Funding:** no information given **Conflicts or Bias:** none apparent **Country**: USA Diaz cont.	CoI model	**Design:** Quantitative descriptive study **Purpose:** To explore validity COI survey's tripartite structure (TP, CP, & SP) and incorporate both STU ratings of the degree to which TP, SP, & CP were manifest in courses and their ratings of importance of each Also explore valitiy of overall COI framework	n=412 even mix of GS and UGS at 4 US colleges and UNIVs (40% RR) **Inclusion criteria:** STU volunteers to complete survey at 4 US colleges and UNIVx **Exclusion criteria:** None identified **Attrition rate:** No information	Study focused on STUs' perceptions of the importance of CoI items. **Definitions:** **TP**= arising out of effective practices in course design and organization, facilitation of learning, and direct instruction. **SP**=degree STUs feel connected one to another realized through affective expression, open communication, and group cohesion **CP**= extent STUs able to construct and confirm meaning through sustained reflection & discourse in OL CoI and conceptualized in 4 phases: triggering, exploration, integration, resolution of ideas and concepts. **RQ1**: does FA confirm construct validity of CoI instrument (and model) when MULT scores that consider item importance as well as degree to which items are met are employed? **RQ2**: How do	**Survey** CoI inventory tool with 34 MULT items addressing TP (13 items), SP (9 items), & CP (12 items). Uses 5-point Likert scale from SDis=1 to SA=5 Item-importance ratings on ordinal scale (1=unimportant to 5=extremely impt.) Principal components analysis of the multiplicative COI survey data supports the construct validity of TP, SP, and CP of the COI model. **Cronbach's Alpha** for Conventional COI: 0.96 for TP, 0.92 for SP, and 0.95 for CP. **Cronbach's Alpha** for Importance of COI items: 0.91 for TP, 0.94 for SP, and 0.94 for CP.	FA of MULT scores for each item of COI computed as the product of an item's course rating score and its corresponding importance rating. FA of MULT scores (item rating importance rating) supported the CoI model's tripartite structure, and so prior validation studies. The *Principal Components* approach in SPSS version 17.0 used to explore subscale structure of the 34 items r/t COI inventory. Oblique rotations (*Direct Obliminal* in SPSS) used with default value δ =0 specified to reasonably limit level of correlation among the factors. Keyser-Meyer-Olkin measure of sampling adequacy was 0.95 suggesting factor analysis should yield distinct and reliable factors. Pattern Matrix (by	- Findings supported CoI tripartite structure (TP, CP, & SP) - STUs felt all items impt; but viewed some items as more impt. than others. - STUs valued TP above CP and above SP. - SP items found least impt of CoI subscales with least variability in gap scores - M responses for 34 items ranged from 4.44 (INSTR clearly communicated impt due dates/time frames for learning activities) to 3.66 (OL or web- based communication is excellent medium for social interaction) - SDs highest (SD=1.11) ("INSTR provided FB that helped me understand my strengths and weaknesses relative to course's goal and objectives") and lowest (SD=0.80) ("INSTR clearly communicated impt course goals") **CoI conventional items:** Collective M scores - TP (M=4.22, SD=0.93) - SP (M=3.98, SD=0.99) CP (M=4.08, SD= 0.89) **Importance ratings:** - Most impt area (M=4.52) "INSTR clearly communicated impt. due dates/time	**Level of evidence:** VI **Strengths:** builds on prior validation studies of COI survey (other studies have found excellent internal consistency/construct validity for full 3-factor CoI instrument), Applicability to my PICOT **Limitations:** No information on how volunteers recruited or inclusion or exclusion data, low RR but only one-time survey **Application to practice:** Gaps in TP items show areas where INSTRs can focus more attention & use time & resources in areas/items perceived to be more important Most impt. area: "INSTR clearly communicated impt. due dates/time frames for learning activities" - Areas to place higher priority: Clearly communication important due dates/time frames for learning activities - Providing timely FB - Clearly communicate impt course topics - Clear instructions on how to participate in course learning activities - Provide FB to help STUs understand strengths and weaknesses relative to course goals/objectives - Guide class toward understanding course topics to clarify thinking

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				descriptive gap analyses comparing mean course ratings and mean item-importance rating inform the construct validity of the CoI framework?		SPSS) Descriptive analysis of gaps t/w course rating scores and respective time importance rating	frames for learning activities" - Least impt. area (M=2.84) "I was able to form distinct impressions of some course participants" - Highest SD (SD=1.26) "OL or web-based communication is excellent medium for social interaction" - Lowest SD (SD=0.70) "INSTR clearly communicated impt. due dates/time frames for learning activities" **Collectively** - TP (M 4.05, SD=0.95) - SP (M 3.52, SD 1.18) - CP (M 3.77, SD = 0.99) - **Gap Analysis w ladder graphs:** Descriptive Comparisons of course and importance - Course ratings Ms (TP=4.20, SP=3.97, CP=4.08) - Importance ratings Ms (TP=4.09, SP=3.34, CP=3.77) Interpretation: STUs value TP most and SP least	STUs may value TP above SP because they correctly view TP as a necessary condition for the development of SP. Potential use of CoI instrument in DNP project for FAC to assess their strengths and weaknesses in relation to TP, SP and CP.

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Hosler, K.A. & Arend, B.D. (2012) The importance of course design, feedback and facilitation: Student perceptions of the relationship between teaching presence and cognitive presence. **Funding:** no information given **Conflicts or Bias:** none apparent **Country:** USA	CoI Framework	**Design:** Descriptive statistics and Qualitative data **Purpose:** Examine student perceptions of the r/s b/w CP and the elements of TP to provide insight and explanation about any r/s found and see if these perceptions differed b/w STUs in f2f classes and STUs in OL classes	N=582 surveys distributed n=208 completed survey (35.7% RR) 68% (n=142) FG 32% (n=66) MG Ages 22-60 years 63% (n=132) OL STUs 37% (n=76) f2f STUs 92% (n=154) GS 8% (n=14) UGS **Inclusion criteria:** Convenience sample of GS and UGSs from 46 different course sections, representing 27 courses across disciplines, were asked to voluntarily complete COI survey from: 28 OL courses and 18 f2f courses **Exclusion criteria:** None noted **Attrition rate:** N/A, only a one-time survey	**Res. Questions:** 1. To what extent do STU perceptions of CP explain the sub-elements of TP? 2. Does the r/s b/w CP and TP differ b/w OL STUs and STUs in f2f classes? 3. To what extent does course satisfaction explain FP and TP? 4. Do STU perceptions of TP and CP vary based on age, previous OL course experience, or gender? 5. How do STUs describe and explain the r/s b/w TP and CP? (to obtain narrative and qualitative information)	Data collected from a single-34 statement CoI survey during the 8th and 9th week of a 10-week course. Each statement evaluated using Likert-type scale from 1 (strongly disagree) to 5 (strongly agree) Validity and reliability for CoI instrument demonstrated previously in several large studies Cronbach's coefficient alpha for this study was .964, suggesting very good overall internal consistency for scores from this sample. Cronbach's coefficient alpha for TP, CP, & satis. Were .966, .953, & .942.	**Stats used:** PASW Statistics Software, version 18 used for all statistical analyses. **RQ 1:** Multiple linear regression analysis. **RQ2:** Independent samples TT. Leven's test for equality of variance showed assumption of equal variances had not been violated. **RQ3:** multiple linear regression analysis. **RQ4**: one-way multivariate ANOVA. Preliminary assumption testing conducted and results of evaluation of linearity, normality, and equality of variance were acceptable **Qualitative analysis** Atlas.ti software to code data & allow themes to be identified, isolated, compared and regrouped.	**RQ1:** 3 elements of TP explained 46.9% of variance in CP and adjusted R^2=.469, $F(3, 194)=58.974$, $p<.001$ **RQ2:**No stat. sig. diff. in score for OL STUs (M=51.36, SD=12.03) and classroom STUs (M=50.56, SD=14.43) t (201)=.423; p=.67) (TT) and the M TP score. Magnitude of diff. in the Ms (M diff = .60, 95% CI: -2.07 to 3.27) was very small (η^2=.0009) **RQ3:** Results indicate CP & TP explained 78.3% of the variance in satis. And adjusted R^2=.783, $F(2, 195)=356.489$, $p<.001$ Qualitative results mirrored statistical findings (STUs felt specific aspects of TP influenced their levels of critical thinking) Findings support hypothesis that CP can be increased or decreased through specific teaching action of INSTR Same themes r/t TP voiced by STUs in both OL and F2F courses but these were more noteworthy OL: course organization, specific INSTR feedback, D mgmt., INSTR participation in Ds	**Level of evidence: VI** **Limitations:** Low RR of 35.7% **Strengths:** (despite low RR, I found study credible & trustworthy) Validity and reliability for instrument demonstrated previously in several large studies Qualitative results mirrored statistical findings (STUs felt specific aspects of TP influenced their levels of critical thinking) Application to my PICOT **Application to practice:** Aspects of TP that STUs felt improved critical thinking were when: • Clear goals, • Relevant assignments, • Direct feedback provided that was encouraging, timely & specific, • Actively facilitated Ds that kept everyone focused and participating at meaningful level. TP is key aspect of fostering CP and therefore should be promoted

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Jackson, L.C., Jones, S.J., & Rodriquez, R.C. (2010). Faculty actions that result in student satisfaction in online courses. **Funding:** no information given **Conflicts or Bias:** none apparent **Country:** USA	Chickering & Gamson's (1987) Seven Principles for Good Practice in Undergraduate ducation and CoI Model	**Design:** Quantitative Descriptive Study **Purpose:** Identify FAC actions which positively influenced STU satis. in OL classes at the CC level	College 1 n= 426 individuals out of 1,403 OL enrollments (30% RR) completed course/INSTR evaluation College 2 – n=1,004 out of 1,459 OL enrollments (69% RR) **Inclusion criteria:** **S**tudents enrolled in OL courses who completed existing course/INSTR evaluations at end of Fall 2006 semester only. **Setting:** 2 public, rural-service CCs located in Texas (College 1 and College 2) **Exclusion criteria:** Not addressed **Attrition rate:** N/A, data based on one evaluation only	IV1-Directions IV2-timeliness IV 3- Expectations IV 4 -Enthusiasm IV 5- Climate IV 6- Activities IV 7-Value DV 1: STU satis. DV 2: Course value	Data obtains from STU responses to each INST's existing OL course/INSTR evaluation instrument from fall 2006 semester. Data from both Colleges imported into Microsoft Excel spreadsheets for consistent labeling of data columns across INSTs. Imported to SPSS 11.0 for analysis	– SPSS 11.0 Statistical analysis including descriptive statistics, Bivariate correlations, Multiple regressions used to identify FAC behaviors which affected the satis. of STUs enrolled in OL – Multiple regression analysis – – Spearman correlation cooefficient with data not randomly distributed for comparison – Levene's Test for equality of variances – One-way ANOVA to confirm findings of initial TTs	FAC actions within OL courses appeared to impact STU satis. Correlations existed b/w specific FAC actions and student satis. at ea. INST. Data revealed strong r/s b/w the satis. with the OL experiences. All analyses indicated that there was less than a 1% chance that the identified r/s occurred by chance **College 1**: strongest r/s b/w IV FAC actions and DV STU satis. High +correlations b/w IVs timeliness/accessibility of ISTR, clearly stated expectation, INSTR enthusiasm, and climate and DV measuring course value. Mod + correlations b/t FAC actions clear directions and activities and STUs' perceived value of course **College 2:**+r/s b/w FAC actions and STU satis. in OL courses. Mod + correlation b/w IV activities and DV perceived value of OL courses. Low + r/s b/w timeliness and value. – STU responses to social aspects of learning environment support COI model and synchronize with TP	**Level of evidence:** VI **Limitations:** Low RR in both colleges, only studied CC students so may not be generalizable to HE universities **Strengths & Application to practice:** offers further definition and refinement of teaching strategies to generate effective social behaviors and comfortable learning environments in the OL class. These social aspects of learning environment support theory behind CoI and TP for overall effective OL experience. Application to my PICOT **Implications:** Direct efforts to educate, train and support FAC in development and delivery of OL courses TNG to include actions to enhance STU engagement and satis. Revise INSTR evaluation instruments to measure effective FAC actions in OL class to create opportunity for FAC development Research based on this study could assist in finding best practices in OL education

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Ke, F (2010). Examining online teaching, cognitive, and social presence for adult students.	CoI Adult learning theory	Mixed method case study (qual and quant), naturalistic case study approach to document OL INSTRs TP	Adult students & instructors of 10 WebCT-based OL courses in higher ed (undergrad to doctoral level) including nursing, edu, business mgmt.. 10 WebCT OL courses at major Hispanic-serving research UNIV in America. Courses ranged from 8-25 enrolled STUs in UG or GS levels Add more from pg 2	Research questions: 1. what was nature of TP in adult-oriented OL courses? 2. What were key features of TP that adult STUs identified as supportive for thei CP and SP 3. What ws nature of CP and SP in adult-oriented OL course 4. What were relations b/w TP, CP & SP?	Interviews, artifact analysis of course sites, content analysis of OL discussion transcripts, learning experience survey INSTR interviews conducted F2F for 45-60 min STU interview were 30-45 min 2 raters coded OL transcripts (inter-rater reliability .87).	Each course examined individually then compared to all 10 cases to identify common and different contextual features impacting online experiences. Single- and cross-case analyses Content analysis of discussion transcripts with each unit classified into 1 of 8 categories under 3 dimensions. Coded by 2 raters and included artifact analysis, thematic analysis, survey and cross-case analysis	Qualities valued by students: • Enhancement with narratives and exemplar cases • Open ended D questions • Mix of class & grp D • Multi-modal interaction • Prefer indiv. Work over group • Clear expectation with rubrics & samples • Flexibility in deadlines • Easy find course design with visual aids • Sense of connection with INSTR & their self-disclosure • Fair, indiv. Attention • Interactivity • Easy access • Prompt response • Support at indiv. level	To create CoI, need to first generate effective TP to reinforce emerging CP & SP. TP should be catalyst that imitates the community development process. Include qualities valued by students in the Tip Sheet Other recommendations: Self-disclosure by instructors (through welcome video, self-intro or personal narrative) and fair attention to students' D posts reinforce sense of connection and motivate adult learners Instruction (virtual lecturing and learning support) and written assignments critical to learning success Quick FB to D posts is most desirable learning support. Provide lots of positive, encouraging FB
Preisman, K. A.(2014). Teaching presence in online education: From the instructor' s point of view.		Mixed methods	Small state college in Nebraska Examines creation of TP from vantage point of a *lone ranger* instructor who was solely responsible for creation and management of course Based on data collected from student grades, SUT-INSTR communication, D posts, course evals. Total of 124 students participated in 2 courses over 3 semesters during fall, 2011, spring and fall 2012	Examines TP from vantage point of a *lone ranger* instructor who is solely responsible for creation and management of the course	Data collected from student grades, STU-INSTR communication, D postings, emails, and courses evals collected from 2 courses	606 pieces of STU-INSTR communication analyzed to identify themes and compare between Minimal TP course and Increased TP course	INSTRs play a key role in creation and facilitation of the learning process, but it is likely more impt for the INSTR to simply be available for SUTs through a well-structured course as opposed to creating a presence of oneself in the OL classroom STUs needed INSTR to be present regarding organization, communication, feedback, and assistance	Focus on "best practice" OL strategies that positively impact STU learning such as design and facilitation of courses by implementing highly cognitive activities and assignments. Feedback, especially formative progressive feedback was impt to STUs Clear goals and objective, effective course management, timely and responsive feedback, quality D board opportunities and variety of learner opportunities to process info

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Citation	Conceptual Framework	Design/Method	Sample/Setting	Major Variables & Definitions	Measurement of Data and Instrument Validity	Data Analysis	Study Findings	Decision for Use in Practice
			Total 606 pieces of STU-INST communication analyzed					
Shea, P. & Vickers, J. (2010). Online instructional effort measured through the lens of teaching presence in the community of inquiry framework: A re-examination of measures and approach **Funding:** no information given **Conflicts or Bias:** none apparent **Country:** USA	CoI model Developed by Garrison et al., 1999	**Design:** Quantitative content analysis Purposeful sample **Purpose:** To understand nature of instructional effort as evidence in full OL courses through conceptual lens of TP	Purposive sample of all content from 2 fully OL identical upper-level courses n=3,422 individual messages coded (as unit of analysis) in total 286 documents **Inclusion criteria:** Included in total: D posts (672 course A, 691 course B) 438 messages (announcements, emails, individual private folders, questions & answer) 41 course docs (lectures, syllabus, orientation, assignments, instructions) 102 STU course artifacts (case studies, research papers) **Setting:** 2 OL Business mgmt. courses during fall 2007 by state college in northeast US, specialized in distance and adult ED for non-traditional learners. Each section designed by content experts and IDs and taught by experienced OL INSTRs who were not the course IDs. **Exclusion criteria:**	TP defined- "the design, facilitation and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile outcomes" **Research Questions:** 1. Where does TP occur in OL courses? 2. How do INSTRs employ communicative functionality with the course to demonstrate TP? 3. In what ways do students demonstrate TP? 4. Does TP shift over time? 5. Does TP correlate with learning outcomes reflected in INST assigned grades?	Analysis of TP behaviors occurring both within and outside main threaded D area of OL courses Used quantitative content analysis to analyze CoI measures of TP to compare a purposive sample of 2 identical sections of a fully OL course taught by INSTRs who appeared to have very different ways of engaging with their STU 2 measures of IR reliability. After initial inter-rater reliability, coders met to negotiate disagreements with both. **Artifact Coding:** **CK** statistics (Course A 0.85-0.91 initially and 0.94-0.97 neg, Course B 0.46-0.89 initial and 0.84-1.00 neg) **HC** (Course A 0.96-0.97 initial and -.97-0.99 negotiated, Course B 0.85-0.95 initial and -.99-1.00 negotiated). **INSTR D IRR** CK Course A= 0.1379 initial, 0.9678 neg HC= 0.4819 initial , 0.9778 neg, Course B	**Stats used:** Quantitative content analysis to analyze CoI measures of TP (TP measures applied to each individual message)	Documented productive instructional effort and found conventional research approaches fail to account for the majority of TP behaviors (thus may significantly under represent productive OL instructional efforts) Restricting analysis of TP to D areas may be too narrow. Importance of examining work occurring throughout entire course Confirmed a 4th Dimension of TP: assessment Significant correlation between TP and learning outcomes (grades for case studies) Effectiveness of INSTR did not depend on TP in D only but responsiveness and interaction with students in variety of forums	**Level of evidence: VI** **Limitations:** Purposive sample began 8 weeks after courses ended, was not feasible to ask INSTRs or students to reconstruct participation **Strengths:** 2 measures of IR reliability used with negotiated reliability all above .94 indicating content analysis reliable, Application to my PICOT **Application to practice and Recommendations for OL INSTRs relevant to DNP project:** – TNG and support for OL FAC around TP with benchmarks for effective interaction – Make clear to students the extent and capacity they participate in course Ds. – Once course underway, if choose not to participate in Ds should make visible their direct involvement in course through announcements, class reminders, private communications with students who fail to participate. – Model how to ask questions in Ds to develop student TP, later, can assign roles to students in Ds. – Tie Ds and f/up learning activities together to gain benefit of correlation between TP and grades

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Citation	Conceptual Framework	Design/Method	Sample/Setting	Major Variables & Definitions	Measurement of Data and Instrument Validity	Data Analysis	Study Findings	Decision for Use in Practice
			Not identified **Attrition rate:** No information		CK= 0.4856 initial, 0.9312 neg, HC=0.7317 initial, 0.9729 neg			
Sheridan, K. & Kelly, M.A. (2010). The indicators of instructor presence that are important to students in online courses. **Funding:** no information given **Conflicts or Bias:** none apparent **Country:** USA	CoI Framework	**Design:** Descriptive statistics Cross-sectional survey **Purpose:** Intent to present a comprehensive list of typical actions that an INSTR would take in setting up, delivering, and monitoring OL courses.	**Sample:** n=65 STUs enrolled OL courses completed online questionnaires 81.5% (n=53) GS 13.8% (n=9) UGS 27.69% (n=18) no prior experience with OL 24.62% (n=16) extensive use of OL **Inclusion criteria:** GS and UGS enrolled in several OL courses in the education depts. at either of 2 large UNIVs in the Midwest **Exclusion criteria:** None indicated **Attrition rate:** N/A only one survey questionnaire given	**Definitions:** IP= INSTRs interaction and communication style and the frequency of the INSTR's input into the class discussions and communications. IP and TP used synonymously.	Data collection via OL Questionnaire = 3 sets of items: 64 close-ended items (measure importance of indicators of IP in OL courses), 5 open-ended items (target STUs' experience w OL learning and their preferences for various types of learning contexts). Additional items added based on INSTR experience. For each indicator, STUs rated importance on scale of 1 (not impt. at all) to 10 (very impt.) Open-ended items-STUs wrote 5 most impt. INSTR behaviors for their success in OL class.	**Stats used:** Closed-ended items analyzed using descriptive statistics. – 10 highest mean ratings = most impt. indicators. – 10 lowest ratings=least impt. – Highest dispersion =least consensus among STUs Prior OL experience treated as ordinal variable based on # prior OL courses ranging from 1(no prior OL course) to 5 (4 or more prior OL courses) Spearman's rho used for correlation coefficients. Low # UGS in sample (n=9) prevented analysis of subset of items based on UGS or GS status. Open-ended items-several levels of analysis, including: – Classical content analysis (to determine	**Indicators of TP:** **Most impt INSTR behavior**="Makes course requirements clear" (M=9.95, SD=0.21) **Next top 3** – "Clearly communicated important due dates/timeframes for learning" (M=9.86, SD 0.43) – "Sets clear expectations for D participation (M= 9.78, SD= 0.54) – "Provides clear instructions on how to participate in course learning activities" (M=9.75, SD=0.59) – Highest mean ratings also had least variability. **Least Important:** – "Has personal website for me to go to" (M= 5.38, SD+3.25) – **Next 3 lowest:** – "Create chapter quizzes" (M=5.53, SD=2.93) – "Engages in 'real time' chat sessions" (M=5.60, SD=3.17) – "Provide video that allows me to hear and see INSTR" (M=5.74, SE=3.17) **Follow-up correlation**	**Level of evidence:** VI **Limitations:** – Convenience sample, results largely descriptive – Broad range of OL experience but majority from one UNIV and may not represent population of STUs in OL courses – 81.5% GS so could not compare GS to UGS **Strengths:** (despite limitations, I found study credible & trustworthy and application to my PICOT) Ratings from close-ended questions were consistent with open-ended items. **Application to practice:** Supports literature that IP is one of the keys to effectiveness of OL learning and INSTRs need to be actively engaged in OL courses. Highlights aspects of IP that are most impt. for student success. Top 4 also had least variability 1. Make course requirements clear 2. Clearly communicate impt. due dates/time frames for learning activities 3. Set clear expectation for D participation 4. Clear instructions on how to participate in learning activities 6 of top 10 behaviors r/t clarity 3 r/t communications

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						indicators most impt based on frequency of responses, with higher frequency assumed to mean great importance). Concept mapping (to show r/s among assigned codes & relative importance of groups of actions & level of specificity that was impt)	**analysis**-negative correlation b/w # prior OL courses and importance of behavior. Strongest neg correlations: – Instructor video $r_s(64) = -.45$, $p<.01$, – Engaging in chat sessions, $r_s(64) = -.40$, $p<.01$, – $r_s(63) = -.57$, $p<.01$, **Highest Frequencies** – "Responding in timely manner" (f=23, 7.69%) – "Responding within 24 hrs" (f=22, 7.36%) "Making requirements clear" (f=18, 6.02%)	3 main higher-order constructs represented in concept map: setup of class, communication and instructor attributes
Sheridan, K. & Kelly, M.A. & Bentz, D. T. (2010). A follow-up study of teaching presence critical to students in online courses **Funding:** no information given **Conflicts or Bias:** none apparent	CoI Framework	**Design:** Descriptive statistics Cross-sectional survey **Purpose:** Examine STUs perceptions of the importance of various indicators of TP for their success in OL courses.	**Sample:** n=245 STUs enrolled OL courses completed online questionnaires 24.08% (n=59) GS 73.88% (n=181) UGS **Inclusion criteria:** GS and UGS enrolled in OL courses in the education depts. at either of 2 large UNIVs in the Midwest **Exclusion criteria:** None indicated **Attrition rate:** N/A only one survey questionnaire given	**Definitions:** IP= INSTRs interaction and communication style and the frequency of the INSTR's input into the class discussions and communications. IP and TP used synonymously. **Research Questions:** 1. What are the differences in the importance of various INSTR behaviors for GS and UGS enrolled in OL courses? 2. What INSTR behaviors do GS & UGS consider to be the most impt for their success in OL	Data collection via OL Questionnaire = 3 sets of items: 64 close-ended items (measure importance of indicators of IP in OL courses), 5 open-ended items (target STUs' experience w OL learning and their preferences for various types of learning contexts). Additional items added based on INSTR experience. For each indicator, STUs rated importance on scale of 1 (not impt. at all) to 10 (very impt.) Open-ended items-STUs wrote 5 most	**Stats used:** Closed-ended items analyzed using descriptive statistics. – 10 highest mean ratings = most impt. indicators. – 10 lowest ratings=least impt. – Highest dispersion =least consensus among STUs Mann-Whitney *U* tests to examine differences in rating for the UGS and GS. Spearman's rho used for correlation coefficients.	There were no statistically sig differences b/w UGS GS ratings of group cohesion or facilitation. Mann-Whitney *U* tests showed 7 indicators that showed sign differences b/w ratings in terms of degree level. For each the UGS ratings significantly lower than GS ratings. 10 indicators most impt to STUs were almost identical for UGS & GS. Most important for GS listed below: Most important behavior for student success= #1-communication. #2Instructor dispositions #3 Feedback – #4 Clarity #5 Discussion participation	**I focused on findings based on GSs as that relates to my project population** Most impt TP behaviors to students success are making course requirement clear and bine responsive to students' needs Affirmed importance of direct instruction and facilitation elements of TP Good quote: "The OL INSTR must be able to compensate for the lack of physical presence by creating an environment in the OL classroom that encourages students to be engaged, motivated, validated, and comfortable participating. Thus the OL INSTR needs to convey that there is an understanding, kind, empathetic, patient, and creative human being at the other end of the

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Country: USA				courseS?	impt. INSTR behaviors for their success in OL class.		#6 Materials #7 Facilitation #8 INST availability, course structure & navigation #9 INDIV replies in D #10 sending reminders	virtual classroom? P. 78 All components of TP in CoI framework are impt to STUs

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Appendix C

Synthesis Table

First Author (see references for full citation)	**Baker**	**Bush**	**Diaz**	**Jackson**	**Ke**	**Preisman**	**Shea & Vickers**	**Hosler**	**Sheridan & Kelly**	**Sheridan,Kelly & Bentz**
Population	377 STUs	97 STU	412 STUs	426 STUs	10 courses (cases)	606 STU-INSTR communications	3,422 coded message	202 STUs	65 STUs	245 STUs
Setting	UNIV	UNIV	HE	CC	UNIV	UNIV	HE	HE	UNIV	UNIV
FACUTLY PREPARATION NEEDS										
Preparation to improve TP	x			x			x			
Other nonspecific preparation or training encouraged				x						
Ongoing professional development desired				x						
FINDINGS SUPPORTING IMPROVED OUTCOMES WHEN INCREASED TEACHING PRESENCE										
STU satisfaction enhanced							x			
STU learning outcomes enhanced -affective learning and cognition	x			x			x			
STU Motivation enhanced	x									
RECOMMENDATIONS TO IMPROVE TEACHING PRESENCE										
Instructional Design and Organization										
Setting Curriculum (TPS #1) The instructor clearly communicated important course topics (for example provided a clear and accurate course overview **(TPS #2)** The instructor clearly communicated important course goals (for example provided documentation on course goals)		x	X #3			x			xx	
Course well designed, organized, good layout and easy navigation of courses					x	x				x
Methodical design prior to course onset	x							x	x	x
Communicate important course topics	x		x						x	x
Important course goals/expectations clearly communicated		x	x	x		x		x	x	x
Visual signals and easy to find, easy to access					x					
Communicate clearly			x	x		x		x	x	x
Designing methods (TPS #3) The instructor provided clear instructions on how to participate in course learning activities (provided clear instructions on how to complete course assignments successfully)			x			x			x	x
Instructions on how to participate clearly communicated			x	x				x	x	x
Clear requirements/expectations	x		x	x			x	x	x	X*
Selection of instructional materials and textbooks										x
Provide relevant assignments						x		x		
Rubrics with samples provided					x					
Course enhanced with narratives and exemplar cases					x					
Provide online resources									x	x
Interactivitiy - Multi-modal interactions					x					
Utilizing the medium effectively The instructor helped me take advantage of the OL environment to assist my learning (provided clear instructions on how to participate in online discussion forums										
Establishing netiquette										
Establishing time parameters (TPS #4) The instructor clearly communicated important due dates/time frames for learning activities (helped students keep pace with the course, provided a clear and accurate course schedule, due dates and more)			X #1						x	x
Due dates clearly communicated			X*	x				x	x	x
Time frames for activities clearly communicated			x	x				x	x	x
Keep course calendar updated									x	x

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Synchronous courses sign. higher TP	x									
First Author (see references for full citation)	**Baker**	**Bush**	**Diaz**	**Jackson**	**Ke**	**Preisman**	**Shea**	**Hosler**	**Sheridan**	**Sheridan**
Facilitation of Discourse (implements designed activities, guides learners using variety of pedagogical strategies, use technology tools to provide guidance, videotaped lectures, written or verbal responses to student comments in discussion, exams, feedback through scores and/or written comments, email, conversations, active learning techniques and technologies to guide learning, co-creator of a social environment conducive for learning.)										
Identifying areas of agreement and disagreement (TPS #5) The instructor was helpful in identifying areas of agreement and disagreement on course topics in ways that helped me to learn	x		x							x
Identify areas of agreement/disagreement										x
Seeking to reach consensus and understanding (TPS #6) The instructor was helpful in guiding the class towards understanding course topics in a way that helped me clarify my thinking.										**x**
Dx misperceptions (could also be Direct instruction)	x		x							
Confirm understanding	x		x							x
Drawing in participants and prompting discussion (TPS #7) The instructor helped to keep students engaged and participating in productive dialog.										x
Engage STUs (or Supporting Discourse per diagram between social and cognitive)	x							x		x
Keep focused & participating	x							x		
Encouraging students to be engaged										x
Assessing the efficacy of the process (TPS #8) The instructor helped keep the participants on task in a way that helped me to learn										x
Encouraging students to be motivated										x
Setting the climate for learning (TPS #9) The instructor encouraged course participants to explore new concepts in the course										x
(TPS #10) The instructor actions reinforced the development of a sense of community among course participants										x
Fair, individual attention					x					x
Encourages student to be validated										x
Encourages students to be comfortable participating										x
A sense of connection with instructors and their self-disclosure (welcome video, self into or personal narrative)					x					
Encouraging, acknowledging, and reinforcing student contributions Overall, the instructor acknowledged student participation in the course (replied in a positive, encouraging manner to student submissions)	**x**		**x**		**x**			**x**	**x**	
Productive discourse	x							x		
Direction	x							x		
Facilitation										x
Responsive to student needs									X*	X*
Support at individual level					x					
Direct Instruction (subject matter expert, model expert analysis of cases and/or issues, diagnosing misconceptions, providing knowledge from various sources such as outside reading, summarizing discussion, focusing discussion on relevant issues, providing feedback to students so they can achieve learning objectives, providing learning environment that assists students to master material (G & Anderson, 03):										
Focusing the discussion on specific issues (TPS #11) The instructor helped to focus discussion on relevant issues a way that helped me to learn.										
Discussion participation										x
Discussion with open ended questions					x					
Mix of class and group discussions					x					
Tie Ds and f/up learning activities together	x						x			
Model asking questions	x		x				x	x	x	
Facilitate discussion	x		x				x	x	x	
Summarize discussion	x		x				x	x	x	
Inject knowledge from diverse sources	x		x						x	
Feedback (TPS #12) The instructor provided feedback that helped me understand my strengths and weaknesses										x
(TPS #13) The instructor provided feedback in a timely fashion	x		X#2		x			x	x	x
Feedback to STUs	x		x			x		x	x	x
Prompt or Timely	x		x		X #1			x	x	X

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Encouraging	x		x		X #2			x	x	
First Author (see references for full citation)	**Baker**	**Bush**	**Diaz**	**Jackson**	**Ke**	**Preisman**	**Shea**	**Hosler**	**Sheridan**	**Sheridan**
Clear when given	x		x					x	x	
Direct feedback	x		x					x	x	
Specific	x		x					x	x	
Acknowledge	x		x					x	x	
Reinforce contributions	x		x					x	x	
Confirming understanding The instructor provided explanatory feedback that assisted me to learn (responded helpfully to discussion comments or course assignments) Other participants in this course provided explanatory feedback that assisted me to learn (responded helpfully to discussion comments or course assignments)										
Presenting content and questions (Shea 2003) The instructor presented content or questions that helped me to learn.										
Summarizing discussion The instructor helped in a way that assisted me to learn										
Diagnosing misunderstandings The instructor helped me to revise my thinking (correct misunderstandings) in a way that helped me to learn										
Injecting knowledge from diverse sources The instructor provided useful information from a variety of sources that assisted me to learn (references to articles, textbooks, personal experiences, or links to relevant external websites)										
Responding to technical concerns This was role of help desk as not to divert resources away from primary role of facilitating learning. So students don't become dependent on teacher for tech support										
Positive Instructor Attributes				x					x	x
Be visible - involvement in the course other than Ds,							x			
Adjust communication patterns to meet STU needs							x			
Empathetic				x					x	
Positive and Friendly				x					x	
Knowledgeable				x					x	
Consistent				x					x	
Keeps promises				x					x	
Accessible				x					x	
understanding										x
Convey understanding, kind, empathetic, patient and creative human in teacher										x
Flexible										x
Helpful						x				x
Instructor Project self and personalities and teaching styles into virtual classroom (illumination of teacher disposition)										x
Sense of human or other disposition										x
Good lecturer										x

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Appendix D

Community of Inquiry Survey Instrument (draft v14)

Teaching Presence

Design & Organization

1. The instructor clearly communicated important course topics.

2. The instructor clearly communicated important course goals.

3. The instructor provided clear instructions on how to participate in course learning activities.

4. The instructor clearly communicated important due dates/time frames for learning activities.

Facilitation

5. The instructor was helpful in identifying areas of agreement and disagreement on course topics that helped me to learn.

6. The instructor was helpful in guiding the class towards understanding course topics in a way that helped me clarify my thinking.

7. The instructor helped to keep course participants engaged and participating in productive dialogue.

8. The instructor helped keep the course participants on task in a way that helped me to learn.

9. The instructor encouraged course participants to explore new concepts in this course.

10. Instructor actions reinforced the development of a sense of community among course participants.

Direct Instruction

11. The instructor helped to focus discussion on relevant issues in a way that helped me to learn.

12. The instructor provided feedback that helped me understand my strengths and weaknesses.

13. The instructor provided feedback in a timely fashion.

Social Presence

Affective expression

14. Getting to know other course participants gave me a sense of belonging in the course.

15. I was able to form distinct impressions of some course participants.

16. Online or web-based communication is an excellent medium for social interaction.

Open communication

17. I felt comfortable conversing through the online medium.

18. I felt comfortable participating in the course discussions.

19. I felt comfortable interacting with other course participants.

Group cohesion
20. I felt comfortable disagreeing with other course participants while still maintaining a sense of trust.

21. I felt that my point of view was acknowledged by other course participants.

22. Online discussions help me to develop a sense of collaboration.

Cognitive Presence

Triggering event
23. Problems posed increased my interest in course issues.

24. Course activities piqued my curiosity.

25. I felt motivated to explore content related questions.

Exploration
26. I utilized a variety of information sources to explore problems posed in this course.

27. Brainstorming and finding relevant information helped me resolve content related questions.

28. Online discussions were valuable in helping me appreciate different perspectives.

Integration
29. Combining new information helped me answer questions raised in course activities.

30. Learning activities helped me construct explanations/solutions.

31. Reflection on course content and discussions helped me understand fundamental concepts in this class.

Resolution
32. I can describe ways to test and apply the knowledge created in this course.

33. I have developed solutions to course problems that can be applied in practice.

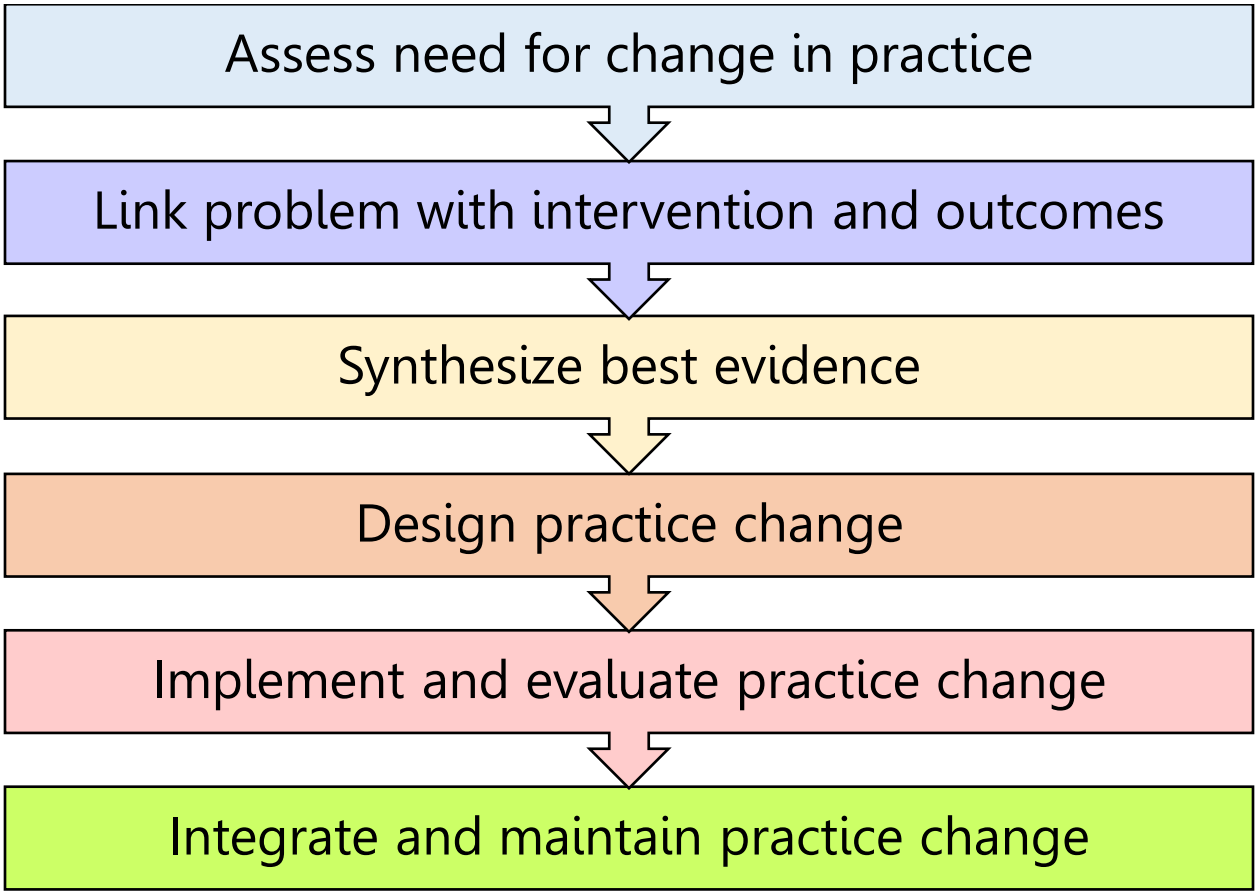
34. I can apply the knowledge created in this course to my work or other non-class related activities.

<u>5 point Likert-type scale</u>
1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

Appendix E

Figure 2. Model For Evidence-Based Practice Change

Revised Version Of Roswurm & Larabee's (1999) Model



(Larrabee, 2004)

Appendix F

1

BEST PRACTICES FOR ENHANCING TEACHING PRESENCE IN ONLINE COURSES

Prior to the Start of the Course

1. **Spend time meticulously designing and organizing course and setting the curriculum**
   - Provide well organized course layout for easy navigation
   - Select course topics
     - Create clear and accurate course overview to communicate important topics
     - Organize content and assignments in chronological order
   - Design and develop all learning methods and activities
     - Identify specific learning outcomes for each module
     - Develop content to match desired outcomes
     - Design quality learning activities (consider activities to facilitate cognitive and social presence; and plan for synchronous activities when possible)
     - Plan relevant assignment. Consider scaffolding assignments (breaking complex assignments into smaller components that are completed and build upon each other so students master each step in the process and develop skills needed for final assignment)
     - Plan formative and summative evaluations of learning
     - Select instructional materials and textbooks
     - Provide online resources
     - Set up discussion forums including instructions on participation

2. **Ensure course contains:**
   - Detailed orientation
   - Grading rubrics and samples of assignments
   - Course calendar with all due dates
   - Methods such as audio, video and text-based formats to clearly communicate:
     - course topics and goals
     - course requirements (**consistently rated by students as one of the most important teaching presence behaviors)
     - how to participate in discussions and all learning activities
     - all due dates and your policy on late work

3. **Send welcome email in advance with information on course and required textbooks**

4. **Record a 3-5 minute introductory video to introduce yourself and the course. This will humanize your presence (good for establishing social presence) and help students form a connection with you as their instructor.**

5. **Review course for clarity and consistency**

At the Beginning of the Course:

1. **Set the climate for learning and foster development of a sense of community**
   - Encourage students to be comfortable participating
   - Use an ice breaker or "getting-to-know-each-other" forum for students to introduce themselves, find commonalities, and build relationships

2

At the Beginning of the Course (continued):

2. **Orient students to the online learning management system (LMS) as needed**
   - A scavenger hunt (series of tasks to perform) can orient students to course layout or LMS
     There are many examples of course orientation videos available online. Here are a couple *examples:*
     D2L tour example - https://www.youtube.com/watch?v=dL8pQKS9wCM
     Blackboard tour example -
     https://cloud.ensemblevideo.com/app/sites/index.aspx?destinationID=NECZuP8KkE2Flr__VJqKeA&contentID=pz2bBjTORkujCoOAdplgEA&pageIndex=1&pageSize=10

3. **Provide clear and accurate course overview to communicate important topics**

4. **Clearly communicate course requirements, directions and timeframes for all course activities, and assignment due dates. Provide explicit and reductant instructions in a variety of formats (audio and text-based)**

5. **Provide clear grading guidelines and rubrics for complex assignments**

6. **Help students access resources**

7. **Establish netiquette**
   - Provide guidelines for interaction online– including appropriate use of the reply and quote functions and posting to the correct discussion forums
   - Include expectations on timeframes and expectations for participation in discussions
     Example - Announcement: "When you reply to the initial post, try to address questions that were raised"
   - Give instructions on expectations for how students should communicate with you and when they can expect a response (24 hour response time recommended during weekdays, 48 hours on weekends)

8. **Create a general discussion board for FAQ or off-topic conversations - offers an avenue for social gathering or expressing ideas beyond course content**

9. **Respond to student questions**

Throughout the Course:

1. **Use announcements frequently**
   - Introduce each week with an overview (audio clip preferred)
     Examples:
     - *Weekly announcement: "This week we will be focusing our discussion on....."*
     - *Weekly announcement: "This week you will be working in groups to create a concept map related to..."*

2. **Keep course calendar updated**

3

Throughout the Course (continued):

3. **Provide useful information from a variety of sources**
   - Enhance course with narratives and exemplar cases
   - Synchronous web conferencing is helpful
   - Video or audio recordings of assignment instructions

     Example of instructor video explaining final project at this link:
     https://cloud.ensemblevideo.com/app/sites/index.aspx?destinationID=NECZuP8KkE2Flr_VJqKeA&contentID=_4LcglBI_EOYaxfo61Sbkg&pageIndex=1&pageSize=10

4. **Use a variety of methods present content (video, audio, text, etc.).**
   - Introductory videos to kick-off each module help maintain social and teaching presence

5. **Send reminders of upcoming activities or due dates**

   Example - Announcement: "Just a reminder that you assignment 1 is due on....." or "Your initial discussion post for the week is due by Tuesday at 11:59 pm..."

6. **Provide Feedback**
   - Let students know when they should expect feedback on assignments
   - Let student know if there may be a delay in receiving feedback and reason for delay
   - Feedback should:
     - Be frequent and prompt

       Answer student questions within 24 hours on weekdays, 48 hours on weekends*
       Feedback on discussions within 72 hours*
       Feedback for assignment by 1 week*
       *Note: Time frames will differ based on the individual pace of each course.
     - Be personalized – address the learner by name
     - Use a positive and encouraging tone
     - Be clear, specific, and direct
     - Ask questions to promote thinking
     - Help learners understand their strengths and weaknesses
     - Acknowledge and reinforce student contributions

7. **Facilitate discourse in discussions:**
   - Set the climate for learning and reinforce community among participants
     - Create an accepting and cooperative climate for learning that sustains social presence

       Discussion post example: "Everyone's contributions are important. Don't be afraid to step out of your comfort zone to share ideas ..."
     - Reinforce the development of a sense of community among course participants by addressing students by name
     - Give fair individual attention and feedback
     - Respond to student needs or technical concerns

       Feedback example: "In order to view the video you will first need to....."
     - Let students know that you will monitor discussions
     - Try to be present in some way every day. Daily checking in is recommended for higher satisfaction for students and instructors

4

Throughout the Course (continued):

Facilitate discourse in discussions (continued):

- Identify areas of agreement and disagreement
  - Look for areas of agreement or disagreement on course topics
    Announcement example: "Group 1 has posted their ideas, does anyone have any counter-examples?"
  - Help resolve disagreements by helping students find congruent relationships

- Seek to reach consensus and understanding
  - Look for consensus among students in discussions
    Discussion summary example: "The unifying theme in this discussion has been…"
  - Guide class towards understanding course topics to help clarify student thinking
    Feedback or discussion post example: "You have a good grasp of the theory, now let's see how you apply….."
  - Scaffold (building in complexity) discussion forums for greater understanding
  - Confirm student understanding
  - Help students revise their way of thinking if they misunderstand
  - Recognize misperceptions
    Discussion post feedback example: "What you are describing is ……. which differs from ….."
  - Provide appropriate content from diverse sources to help engage students to see relevance to their learning
    Feedback or discussion post example: "Let me direct your attention to some additional resources that may be helpful as you evaluate your healthcare system…. Here is a link to…"
  - Link content to their profession
  - Inject own knowledge as needed

- Encourage, acknowledge, and reinforce student contributions
  - Encourage participants to explore new concepts in the course ("think out loud")
  - Recognize and reinforce contributions that add to understanding
    Discussion post example: "Insightful post Sue. You make a great point that….." or "It's nice to get everyone's perspective, keep sharing your ideas as you…"

- Draw in participants and prompt discussion, but do not dominate discussions
  - Initiate discussions with questions
  - Model engagement and guide students to respond to each other's questions
  - Foster peer-to-peer communications in discussions
  - Draw in students who are less active
    Discussion post example: "Let's hear from the rest of the group…..what other thoughts or suggestions do you have on….?"
  - Refrain from be overly "present" to facilitate student interaction

- Assess the efficacy of the process
  - Focus discussion on relevant issues that promote knowledge construction and application

5

Throughout the Course (continued):

Facilitate discourse in discussions (continued):

- Keep the course participants engaged and on task in a way that helps them to learn
  Discussion post example: "Let's get back to the original question of..... and keep this focused on....."
- Keep discussion posts moving forward to construct and apply knowledge
- Tie discussion and follow-up learning activities together
- Summarize regularly – this can, and often should, be done by students
- Model how to summarize discussions
  Discussion post example: "This week's discussion covered the topic of...and as we learned...."

Positive Instructor Attributes and Disposition Identified by Students

- Responsive to student needs
- Visible and involved in course other than discussions
- Adjusts communication patterns to meet student needs
- Kind
- Empathetic
- Understanding
- Friendly
- Positive
- Knowledgeable about content
- Keeps promises
- Consistent
- Accessible
- Flexible
- Patient
- Helpful
- Sense of humor
- Good lecturer
- Projects self and personality into virtual classroom

Additional Resources:

Community of Inquiry Website: https://coi.athabascau.ca/

Teaching Presence in Online Learning Interview video with Dr. Mark Kallel
https://www.youtube.com/watch?v=9izxQXDgkNA&feature=youtu.be

"Teaching Presence and Leadership" recorded webinar recorded in June 2015, by Garrison, Cleveland-Innes & Vaughn:
https://connect.athabascau.ca/p1xtwl3v67v/?launcher=false&fcsContent=true&pbMode=normal

Interactive example of the CoI framework and video of Dr. Garrison at this site:
https://learningtechnologies.epigeum.com/courses/learning_technologies/473/course_files/html/ote_1_20.html

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Appendix G

IRB Approval Letter from Arizona State University

EXEMPTION GRANTED

Debra Hagler
CHS - Evaluation and Education Excellence
602/496-0802
DEBRA.HAGLER@asu.edu

Dear Debra Hagler:

On 7/30/2015 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Best Practices for Enhancing Teaching Presence in Online Courses - An Asynchronous Online Educational Module for Online Nursing Faculty
Investigator:	Debra Hagler
IRB ID:	STUDY00002965
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Protocol, Category: IRB Protocol; • Project Flowchart Diagram and all surveys, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Online Consent Form, Category: Consent Form; • Scripts, Category: Recruitment Materials;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 7/30/2015.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc:
Connie Miller

Appendix H

IRB Site Approval Letter from The University of Arizona College of Nursing

THE UNIVERSITY OF ARIZONA
College of Nursing

Office of the Dean

PO Box 210203
Tucson, AZ 85721-0203
Tel: (520) 626-6152
Fax: (520) 626-2669
www.nursing.arizona.edu

August 7, 2015

Connie Miller, MSN, RNC-OB, CNE, CCCE
Clinical Assistant Professor
The University of Arizona College of Nursing
PO Box 210203
Tucson, AZ 85721

Dear Ms. Miller,

Thank you for your interest in evaluating the implementation of an evidence-based educational module for online faculty members. Your DNP project *Best Practices for Enhancing Teaching Presence in Online Courses- An Asynchronous Online Educational Module for Online Nursing Faculty* has been approved to be conducted at The University of Arizona College of Nursing pending Human Research Site Authorization approval by The University of Arizona Institutional Review Board (IRB). We acknowledge that this project has already been approved by Arizona State University IRB. We look forward to assisting you with this exciting project and look forward to learning the results.

Sincerely,

Joan L. Shaver

Joan L. Shaver, PhD, RN, FAAN
Professor and Dean

Ida M. (Ki) Moore

Ida M (Ki) Moore, PhD, RN
Anne Furrow Professor and Biobehavioral Health Sciences Division Director

Appendix I

Faculty Meeting Announcement Script

Hello, my name is Connie Miller and I am a doctoral student in the DNP in Innovation Leadership at Arizona State University's College of Nursing and Health Innovation. I am completing my evidence-based project here at the College of Nursing and very soon I will be contacting faculty members who teach online with an email invitation to participate in my project.

Participation will involve viewing an online asynchronous educational module (approximately 30 minutes in length) entitled *Best Practices for Enhancing Teaching Presence in Online Courses*. Before and after the module there is a short quiz as well as a Teaching Presence survey to complete. The estimated total time required to complete the educational module and surveys will be approximately 60-70 minutes.

Those who complete the module and surveys will be invited to complete one final application survey that will take approximately 10 minutes to complete. This is to be completed 8 weeks after completing the module. Because I will not know who participated in the module, the reminder email will be sent to all eligible faculty members who received the initial email invitation.

You are eligible to participate if you currently teach online and have taught at least one online course in the past. Participation is strictly voluntary and there are no foreseeable risks. If you choose not to participate or you withdraw from the project at any time, there is no penalty and it will not affect your job status in any way.

Your responses on the questionnaires will be used to evaluate the effectiveness of the educational module. All responses will be anonymous and identified only by a self-generated personal identification number. The results of this project may be used in reports, presentations, or publications, but only in aggregate form. Your name will not be known or used.

I appreciate your consideration and if you would like to participate or have any questions concerning this project, you can contact me at (520) 869-8835 or csmille9@asu.edu

Appendix J

Email Recruitment Script

Best Practices for Enhancing Teaching Presence in Online Courses

Date: 7/24/2105

Dear Participant,

I am a graduate student under the direction of Dr. Debra Hagler in the College of Nursing and Health Innovation at Arizona State University. I am inviting you to participate in an evidence based educational module to enhance teaching presence in online courses. This will involve viewing an online asynchronous educational module (approximately 30 minutes in length), completing a short pre- and post-module quiz related to the module content (approximately 10 minutes each) and pre- and post-module Teaching Presence surveys (each 7 minutes to complete). The estimated total time required to complete the educational module and surveys will be approximately 60 minutes. Eight weeks following the educational module you will be invited to complete an application survey that will take approximately 10 minutes to complete.

You are eligible to participate in this project because you are currently teaching an online course. Your participation is voluntary. Responses to the questionnaires will be used to evaluate the effectiveness of the educational module. You can skip questions in any of the surveys if you wish. If you choose not to participate or to withdraw from the program at any time, there will be no penalty. Participation in this study will not affect your job status. You must be at 18 years or older to participate in the study. There are no foreseeable risks or discomforts to your participation.

Your responses on the questionnaires will be used to evaluate the effectiveness of the educational module. All responses will be anonymous and identified only by a self-generated personal identification code. The results of this project may be used in reports, presentations, or publications, but only in aggregate form. Your name will not be known or used.

If you have any questions concerning this project, please contact the following team members:
Debra Hagler, PhD (602) 496-0802 DEBRA.HAGLER@asu.edu
Connie Miller, MSN, (520) 869-8835 or csmille9@asu.edu

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. Please let me know if you wish to be part of the study.

Sincerely,

Connie S. Miller, MSN, RNC-OB, CNE

Appendix K

Reminder Email Recruitment Script

Reminder - Invitation to participate in DNP project and additional link provided

Second notice invitation to participate and additional link to the post module summary. Note: this is only for those few who already completed the module but not the post test. If interested in the post-test and CE certificate still you can easily access via this link: Survey link here

Dear New Participant,

I am a graduate student under the direction of Dr. Debra Hagler in the College of Nursing and Health Innovation at Arizona State University. I am inviting you to participate in an evidence based educational module to enhance teaching presence in online courses. This will involve viewing an online asynchronous educational module (approximately 30 minutes in length), completing a short pre- and post-module quiz related to the module content (approximately 10 minutes each) and pre- and post-module Teaching Presence surveys (each 7 minutes to complete). The estimated total time required to complete the educational module and surveys will be approximately 60 minutes. Eight weeks following the educational module you will be invited to complete an application survey that will take approximately 10 minutes to complete.

You are eligible to participate in this project because you are currently teaching an online course.
Your participation is voluntary. Responses to the questionnaires will be used to evaluate the effectiveness of the educational module. You can skip questions in any of the surveys if you wish. If you choose not to participate or to withdraw from the program at any time, there will be no penalty. Participation in this study will not affect your job status. You must be at 18 years or older to participate in the study. There are no foreseeable risks or discomforts to your participation.

Your responses on the questionnaires will be used to evaluate the effectiveness of the educational module. All responses will be anonymous and identified only by a self-generated personal identification code. The results of this project may be used in reports, presentations, or publications, but only in aggregate form. Your name will not be known or used.

If you have any questions concerning this project, please contact the following team members:
Debra Hagler, PhD (602) 496-0802 DEBRA.HAGLER@asu.edu
Connie Miller, MSN, (520) 869-8835 or csmille9@asu.edu

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. Please let me know if you wish to be part of the study.

Sincerely,

Connie S. Miller, MSN, RNC-OB, CNE
If you are interested in participating in this project, please click on the following link: Survey link here

Note: 1 contact hour available after completing the post module survey — *The University of Arizona Continuing Nursing Education is an approved provider of continuing nursing education by the Western Multi-State Division, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.*

Appendix L

Email Script to Participants 8 Weeks after Completing Module

This email message is for those who participated in the evidence-based educational module *Best Practices for Enhancing Teaching Presence in Online Courses*. If you elected not to complete the module, you can disregard this message.

If you completed the educational module, I thank you for your time and would like to invite you to complete one final Teaching Presence Application survey that will take approximately 10 minutes to complete. The link to the survey is at the end of this message. You will need your self-generated personal ID number to log in (the suggested format for the ID was the first letter of mother's first name, followed by last four digits of your home phone number, with no added spaces. For example: L6245).

Responses will be used to evaluate the effectiveness of the educational module. Your participation in the survey is voluntary and you can skip any question or stop at any time. If you choose not to participate there will be no penalty and it will not affect your job status.

Your responses on the questionnaires will be used to evaluate the effectiveness of the educational module. All responses will be anonymous and identified only by the self-generated personal identification number. The results of this project may be used in reports, presentations, or publications, but only in aggregate form. Your name will not be known or used.

If you have any questions concerning this project, please contact the following team members:
Debra Hagler, PhD (602) 496-0802 DEBRA.HAGLER@asu.edu
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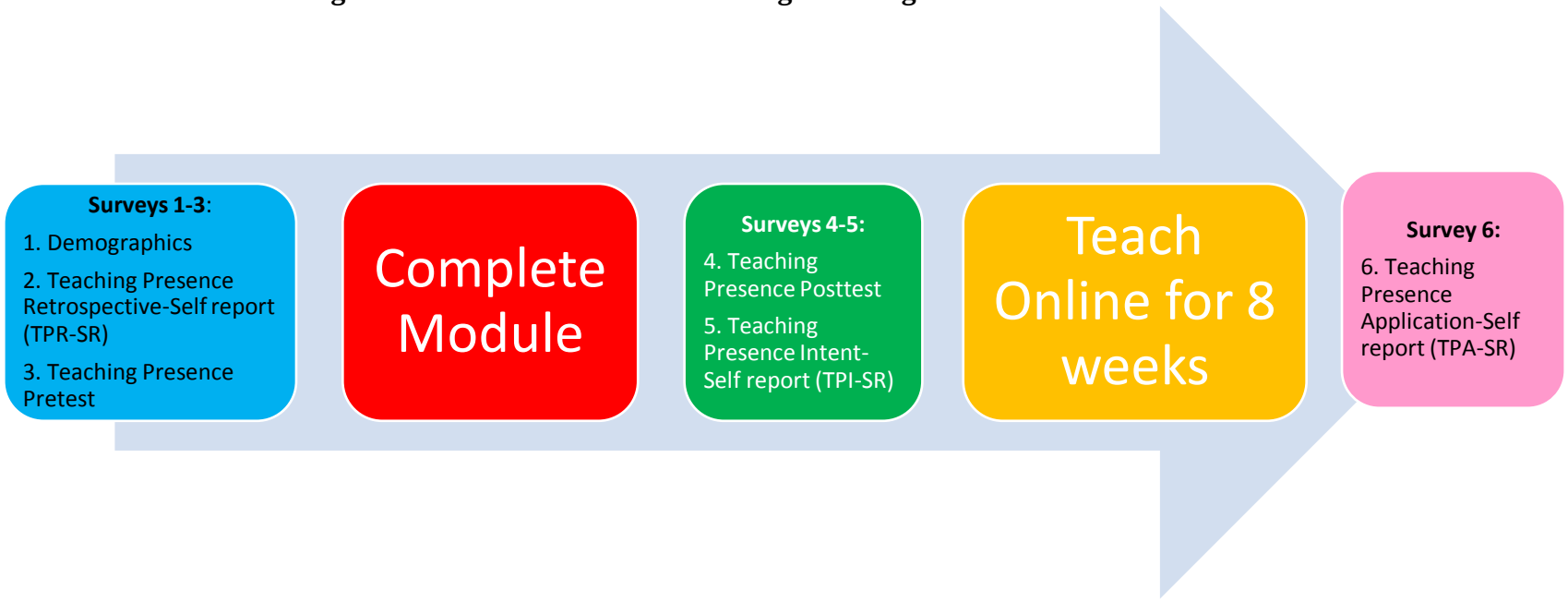
If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. Please let me know if you wish to be part of the study.

I appreciate your participation in this final survey. You can access the survey using your personal identification number created specifically for this project at the following link:

Survey link here

Appendix M

Figure 3: Best Practices for Enhancing Teaching Presence Online Flow Chart



This is a table with the sequence of steps the participants were to go through – perhaps not all did in this order, and no all finished the entire process

Steps	1 Complete demographic survey	2 Complete TPR-SR survey	3 Complete pretest	4 Complete Module	5 Optional complete eval to get CE certificate	6 Complete posttest	7 Complete TPI-SR	8 Teach online course for 8 weeks	9 Complete TPA-SR	10 Answer open-ended questions after TPA SR
Survey #	1	2	3	NA	NA	4	5	NA	6	
Description and Time commitment	Demographics – 3 min to complete	TPR-SR – 7 min to complete	Pretest (same questions as posttest) 10 min to complete	Module 45 min to complete	CE cert	Posttest (same questions as pretest) 10 min to complete	TPI-SR – 7 min to complete	Teach 8 weeks	TPA-SR – 10 min to complete	Open ended questions 1-2 mon to complete

Appendix N

#1 Demographic Survey

Please answer the following questions as they relate to your current teaching position:

Age

- Less than 25 (1)
- 25-34 (2)
- 35-44 (3)
- 45-54 (4)
- 55-64 (5)
- 65+ (6)
- I choose not to answer this question

Which of the following degrees have you earned? Select all that apply

- MA
- MS
- MSN
- MAdmin
- MEd
- EdD
- DNP
- PhD
- Other _____
- I choose not to answer this question

Do you have a graduate degree in education?

- Yes
- No
- I choose not to answer this question

How many formal face-to-face courses have you taught in the past?

- 1-3 courses
- 4-6 courses
- 7-10 courses
- >10 courses
- I choose not to answer this question

How many formal blended (online and face-to-face) courses have you taught in the past?

- 1-3 courses
- 4-6 courses
- 7-10 courses
- >10 courses
- I choose not to answer this question

How many fully online courses have you taught in the past?

- 1-3 courses
- 4-6 courses
- 7-10 courses
- >10 courses

- I choose not to answer this question

Have you ever been a student in a formal online education program?

- Yes
- No
- I choose not to answer this question
  (Question logic)- if yes next question) how long were you a student in an online program? (specify number of years) _____
- I choose not to answer this question

How were you prepared **to teach online**? Check all that apply.

- No specific training
- Informal self-study
- On-the-job training
- Mentoring
- Continuing education program
- Educational conference
- Online teacher training program
- Graduate program education
- Other _____
- I choose not to answer this question

What is your current teaching role/responsibility?

- Lead faculty/course chair
- Section faculty/teaching team member
- Other _____
- I choose not to answer this question

Have you have ever developed a course in any format (ie. Face-to-face, blended, or online)?

- Yes
- No
- I choose not to answer this question

(Question logic)- if yes,... Indicate the type/format of the course(s) you have developed (Select all that apply)

- Online
- Blended
- Face to face
- I choose not to answer this question

Appendix O

#2 Teaching Presence Retrospective- Self Report (TPR- SR) Survey

[redacted]

Appendix P

#3 Teaching Presence Pre-test

Test your knowledge: Read each statement and select the answer you think is correct

1. The Community of Inquiry Framework was originally developed to

   A. research the complex dynamics of online learning
   B. identify interactive strategies for online instruction
   C. determine the technology needed to teach online
   D. design online courses for optimal student learning

1. Which of the following is a part of the Community of Inquiry (CoI) Framework?

   A. Intellectual Presence
   B. Community Presence
   C. Cognitive Presence
   D. Interactive Presence

3. In the Community of Inquiry Framework, social presence is defined as the ability of participants to

   A. identify with the community, communicate purposefully in a trusting environment, and develop interpersonal relationships by way of projecting their individual personalities.
   B. develop cohesive relationships, interact meaningfully with others, and dialog purposefully through participation in online discussions.
   C. engage with the content, apply new ideas, and project personal feelings of belonging in the online environment by way of purposeful online discourse.
   D. work together to recognize problems, brainstorm ideas, and create solutions through information exchange and projecting individual understanding of concepts.

4. In the Community of Inquiry Framework, cognitive presence is defined as the extent to which learners are able to

   A. relate and communicate with one another by projecting their ideas and understanding in online discussions.
   B. construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry.
   C. develop cohesive relationships and collaborate in discussions to realize meaningful educational outcomes.
   D. interact and express emotions through meaningful discourse in online learning activities and discussions.

5. In the Community of Inquiry Framework, teaching presence is defined as

A. the personality, character, and style used by a teacher to establish his/her identity in the online environment to foster effective and successful learning outcomes.
B. the disposition, behaviors, and projection of individual characteristics for the purpose of facilitating online learning and realizing successful educational outcomes.
C. the passion, excitement, and enthusiasm for teaching that is conveyed to enhance engagement and realize personally meaningful learning outcomes.
D. the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile outcomes.

6. According to the Community of Inquiry framework, what are the three components of teaching presence?

A. Interactive Teaching, Connecting Ideas, and Concept and Dissemination
B. Direct Instruction, Facilitating Discourse, and Design and Organization
C. Triggering Event, Supporting Discourse, and Construct and Interaction
D. Information Exchange, Enhancing Discussion, and Process and Diffusion

7. According to the body of evidence, which of the following is consistently rated by students as one of the most important behaviors to promote teaching presence?

A. Welcoming students with introduction videos
B. Selecting good textbooks and resources
C. Communicating course requirements
D. Leading and summarizing all discussions

8. Which of the following is an example of teaching presence in the Design and Organization component?

A. Setting curriculum
B. Seeking consensus
C. Presenting content
D. Focusing discourse

9. Which of the following is an example of teaching presence in the Facilitating Discourse component?

A. Presenting educational content
B. Responding to technical concerns
C. Setting the climate for learning
D. Establishing time parameters

10. Which example is an indicator of teaching presence in the Direct Instruction component?

A. Reinforcing positive student contributions
B. Injecting knowledge from diverse sources
C. Communicating clearly all that is required
D. Encouraging participants in discussions

Appendix Q

#4 Teaching Presence Post-test (identical to pre-test, completed after module)

Test your knowledge: Read each statement and select the answer you think is correct

1. The Community of Inquiry Framework was originally developed to

   A. research the complex dynamics of online learning
   B. identify interactive strategies for online instruction
   C. determine the technology needed to teach online
   D. design online courses for optimal student learning

2. Which of the following is a part of the Community of Inquiry (CoI) Framework?

   A. Intellectual Presence
   B. Community Presence
   C. Cognitive Presence
   D. Interactive Presence

3. In the Community of Inquiry Framework, social presence is defined as the ability of participants to

   A. identify with the community, communicate purposefully in a trusting environment, and develop interpersonal relationships by way of projecting their individual personalities.
   B. develop cohesive relationships, interact meaningfully with others, and dialog purposefully through participation in online discussions.
   C. engage with the content, apply new ideas, and project personal feelings of belonging in the online environment by way of purposeful online discourse.
   D. work together to recognize problems, brainstorm ideas, and create solutions through information exchange and projecting individual understanding of concepts.

4. In the Community of Inquiry Framework, cognitive presence is defined as the extent to which learners are able to

   A. relate and communicate with one another by projecting their ideas and understanding in online discussions.
   B. construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry.
   C. develop cohesive relationships and collaborate in discussions to realize meaningful educational outcomes.
   D. interact and express emotions through meaningful discourse in online learning activities and discussions.

5. In the Community of Inquiry Framework, teaching presence is defined as

A. the personality, character, and style used by a teacher to establish his/her identity in the online environment to foster effective and successful learning outcomes.
B. the disposition, behaviors, and projection of individual characteristics for the purpose of facilitating online learning and realizing successful educational outcomes.
C. the passion, excitement, and enthusiasm for teaching that is conveyed to enhance engagement and realize personally meaningful learning outcomes.
D. the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile outcomes.

6. According to the Community of Inquiry framework, what are the three components of teaching presence?

A. Interactive Teaching, Connecting Ideas, and Concept and Dissemination
B. Direct Instruction, Facilitating Discourse, and Design and Organization
C. Triggering Event, Supporting Discourse, and Construct and Interaction
D. Information Exchange, Enhancing Discussion, and Process and Diffusion

7. According to the body of evidence, which of the following is consistently rated by students as one of the most important behaviors to promote teaching presence?

A. Welcoming students with introduction videos
B. Selecting good textbooks and resources
C. Communicating course requirements
D. Leading and summarizing all discussions

8. Which of the following is an example of teaching presence in the Design and Organization component?

A. Setting curriculum
B. Seeking consensus
C. Presenting content
D. Focusing discourse

9. Which of the following is an example of teaching presence in the Facilitating Discourse component?

A. Presenting educational content
B. Responding to technical concerns
C. Setting the climate for learning
D. Establishing time parameters

10. Which example is an indicator of teaching presence in the Direct Instruction component?

A. Reinforcing positive student contributions
B. Injecting knowledge from diverse sources
C. Communicating clearly all that is required
D. Encouraging participants in discussions

Appendix R

 # 5 Teaching Presence Intent-Self Report (TPI-SR) Survey

[redacted]

Appendix S

#6 Teaching Presence Application- Self Report (TPA- SR) Survey

[redacted]