

AFFORDANCES OF COMMUNITY OF INQUIRY METHODS IN MEASURING
AND EVALUATING TEACHING PRESENCE TO GUIDE PRACTICE

By

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Abstract

The Community of Inquiry (COI) model's construct of teaching presence provides a useful framework for understanding the practice-based requirements of effective online instruction. Teaching presence consists of instructor practice related to instructional design, direct instruction, facilitating discourse, and assessment of student work for the purpose of realizing educationally worthwhile outcomes. Providers of online continuing professional development courses may benefit from focusing on teaching presence to evaluate and improve practice. Two primary COI methods are used for measuring teaching presence in online courses: content analysis and student surveys. The purpose of this study was to compare the relative advantages of each method to guide improvements to practice. The mixed methods case study research design collected data on teaching presence in five online, instructor-led professional development courses. A sample of 26 students was surveyed to capture their reflections on the types and amounts of teaching presence they perceived in the courses. A content analysis was undertaken in two of the five courses to identify and tabulate instances of teaching presence in course content. Findings included that content analysis methods captured the quantity and location of teaching presence in the analyzed courses and made a useful distinction between teaching presence related to instructional design as compared to instructor-student interactions. Content analysis limitations included its focus on quantity and not quality. Pre- and post-course rubrics were proposed as a more practical approximation of the content analysis method. The student survey was found to capture student perceptions of the presence and quality of teaching presence. The student survey also had the advantage of an absolute scale to identify aspects of

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teaching presence in need of improvement. A shortened student survey was proposed to include only items for which student perceptions would be most appropriate. Two products were developed to support the transition of COI methods to professional development settings: a *Teaching Presence Evaluation Toolkit* with rubric and student survey measurement tools designed for program administrators, and an online course, *Improving Teaching Presence in Online Courses*, for instructors to learn best practices for the expression of teaching presence.

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Chapter 1: Introduction

Ensuring students are satisfied with their online learning experience is gaining importance as the market for instructor-led, online continuing professional development courses continues to grow and become more competitive (Pappas, 2015; National Center for Education Statistics, 2014). Most program administrators are aware that increased student satisfaction can lead to program outcomes such as positive perceptions of course quality (Moore & Kearsley, 1996; Yukselturk & Yildirim, 2008), retention and persistence in courses (Allen & Seaman, 2008; Noel-Levitz, 2011), pursuing additional online courses (Allen & Seaman, 2008), and recommending courses to others (Endres, Chowdhury, Frye, & Hurtubis, 2009). Student perceptions of instructor practice are one of the greatest predictors of student satisfaction, and the Community of Inquiry's (COI) construct of teaching presence offers insights into the kinds of instructor practices that support a worthwhile learning experience. The COI model is the most widely cited model of online teaching and learning in higher education research (Bozkurt et al., 2015), but is relatively new to continuing professional development settings.

Continuing professional development providers offer courses and programs geared towards the learning needs of business professionals. Providers in this context may find it beneficial to better understand the elements of good instructor practice and how to effectively measure and evaluate teaching presence to guide improvements designed to increase student satisfaction. While COI methods have been applied in higher education research settings for almost 20 years (Garrison et al., 1999), there is a gap in the research related to examining the relative affordances of using these methods to measure teaching presence in continuing professional development settings when the resulting data will be used to guide improvements

to practice. The goal of this study and the resulting products was to contribute to COI research by contrasting two commonly-used COI methods for measuring teaching presence: content analysis and student surveys. Students in five online, instructor-led continuing professional development courses offered by a northeastern university were surveyed on teaching presence, and two of the courses underwent a content analysis to identify and tabulate instances of teaching presence. The students worked in business and government settings and the instructors were experienced industry professionals. The results of the methods comparison were then used to inform the design of products that could be utilized by continuing professional development program administrators and online course instructors to evaluate and improve instructional practice.

This dissertation portfolio is comprised of three products: a scholarly article, a toolkit on measuring teaching presence for use by program administrators, and a professional development course on teaching presence for online instructors. The scholarly article reports on my dissertation study to examine the affordances of using the two contrasting COI methods to get a better understanding of how each method identifies areas of instructor practice that could be improved. The article targets the COI research community and will be submitted to *Online Learning*, formerly the *Journal of Asynchronous Learning*, which is a peer-reviewed journal that has published a significant number of articles on COI methods by leading researchers. The article considers the following research questions:

1. What aspects of teaching presence are measured using COI content analysis and student survey methods?

2. What are the relative affordances of teaching presence data collected using COI content analysis and survey methods when analyzing the data to guide improvements to practice?

The results of the study highlighted the affordances of each method to guide practice and suggestions were made for their practical application.

The second product, a *Teaching Presence Evaluation Toolkit*, was designed based on the results of my study and my experience as an instructional designer of continuing professional development courses. It is available in an online version created using Articulate Rise e-learning software. The toolkit begins with an overview of the COI model and its construct of teaching presence, followed by the introduction of three COI data collection tools I designed and developed to build on the affordances and relative advantages of existing COI methods, but in a form and process that is more feasible for a practitioner audience. The three modified COI data collection tools include: (1) a *pre-course rubric* focused on teaching presence related to instructional design based on modified COI content analysis design; (2) a *post-course student survey* based on a modified COI survey design to collect student perceptions of instructor-student interactions and the more subjective aspects of instructional design; and, (3) a *post-course rubric* focused on confirming key instructor-student interactions took place during a course, also based on modified COI content analysis design. Suggestions and prompts in the rubrics were included to guide the evaluation related to expected location and quality of expression of teaching presence. An *Instructor Scorecard* was also included as a simple approach to share collected data with instructors. In developing the toolkit, I was able to also consider, based on my experience as an instructional designer, how instructional design

decisions can provide a foundation for effective instructor-student interactions during a course, which is an area of practice not yet fully explored by COI researchers.

The final product was a professional development e-learning course, *Improving Teaching Presence in Online Courses*, developed for online instructors. The course focuses on communicating best practices for applying the construct of teaching presence to instructional design and instructor-student interactions. The course is an on-demand, self-directed tutorial approximately 45 minutes in length and created using Articulate Rise e-authoring software. The course starts with an introduction to the COI model, the construct of teaching presence, and a brief overview of COI data collection methods. Then, it provides an in-depth consideration of each indicator of teaching presence, including information from the research literature, suggested best practices related to expressing teaching presence in instructional design and instructor-student interactions, and additional resources. This product builds on the study by providing practical approaches to refining practice after measurement and data analysis identify areas in need of improvement. Two program administrators and one instructional designer reviewed and provided feedback on the course and toolkit.

The three dissertation deliverables provide the same components as a traditional dissertation, including a review of relevant literature, methods, results and analysis, and a focus on implications for practice. The *Teaching Presence Evaluation Toolkit* and the course, *Improving Teaching Presence in Online Courses*, accomplish my personal goal of introducing COI methods to continuing professional development settings. When utilized by program administrators and online instructors, these products have the potential to improve teaching presence in online courses and, as a result, increase student satisfaction.

Chapter 2: Scholarly Article

Affordances of Community of Inquiry Methods in Measuring and Evaluating Teaching Presence to Guide Practice

Abstract

The Community of Inquiry (COI) model's construct of teaching presence provides a useful framework for understanding the practice-based requirements of effective online instruction. Providers and instructors of online continuing professional development courses may benefit from focusing on teaching presence to evaluate and improve practice. The purpose of this study was to better understand the relative advantages of the two primary COI methods: content analysis and student surveys. The mixed methods case study research design collected data on teaching presence in five courses: a sample of 26 students was surveyed to capture reflections of teaching presence perceived during the courses, and a content analysis was undertaken in two of the five courses to identify and tabulate instances of teaching presence in course content. The content analysis method was found to capture the quantity and location of expressions of teaching presence well. A limitation was its focus on quantity and not quality, and *pre- and post-course rubrics* were proposed as a more practical approximation of the content analysis method. The student survey method was found to capture the quality of teaching presence and had the advantage of having an absolute scale to identify areas in need of improvement; a shortened student survey was proposed to include only items for which student perceptions would be most appropriate. This study has implications for the practical application of COI methods based on the affordances of each method to guide improvements to instructor practice in continuing professional development settings.

Keywords: Community of inquiry, teaching presence, online instructor practice, continuing professional development, student satisfaction, COI tools

Introduction

The market for online continuing professional development is growing rapidly. In 2015, 77% of companies offered online professional development courses to their employees (Pappas, 2015), and approximately 15-30% of these courses were asynchronous and instructor-led (National Center for Education Statistics, 2014). Evidence from studies of online courses has shown that student satisfaction is important to a range of program outcomes, such as: increasing positive perceptions of course quality (Moore & Kearsley, 1996; Yukselturk & Yildirim, 2008); retention and persistence in courses (Allen & Seaman, 2008; Noel-Levitz, 2011); pursuing additional online courses (Allen & Seaman, 2008); and recommending courses to others (Endres et al., 2009). Although it can be unclear how to improve student satisfaction directly, instructor practice has a significant impact on student satisfaction and is a program component that continuing professional development practitioners have more direct control over (Bangert, 2009; Bocchi, Eastman, & Swift, 2004; Marks, Sibley, & Arbaugh, 2005; Shea, Fredericksen, Pickett, & Pelz, 2003; Shea, Vickers, & Hayes, 2010; Webster & Hackley, 1997). Understanding the elements of good instructor practice – including how to effectively identify and measure those elements – can guide improvements to practice that may lead to increased student satisfaction.

The Community of Inquiry (COI) model's construct of *teaching presence* defines and operationalizes online instructor practice that supports collaborative inquiry and learning in higher education online courses (Anderson, Rourke, Garrison, & Archer, 2001; Garrison, Anderson, & Archer, 1999; Shea et al., 2010). Similar to the broader construct of instructor practice, teaching presence is also strongly correlated with student satisfaction (Akyol & Garrison, 2008; Arbaugh et al., 2008; Bangert, 2009; Miller, Hahs-Vaughn, & Zygmouris-Coe,

2014; Shea, et al., 2010; Shea, Fredericksen, et al., 2003; Swan & Shih, 2005). There are two validated COI methods used to measure teaching presence: content analysis and student surveys. The goal of both methods is to better understand the *presence* of various instructor actions in a course (Anderson et al., 2001; Garrison et al., 1999; Shea et al., 2010). While much of the existing research on COI methods has focused on confirming the construct of teaching presence and validating measurement tools, there are several studies that have also used teaching presence survey data to guide improvements to practice (Shea, Fredericksen, et al., 2003; Shea, Pickett, & Pelz, 2003; Swan, Day, Bogle, & Matthews, 2014). Content analysis and student surveys may well have different affordances to guide improvements, and one may better measure aspects of teaching presence than the other; however, this is an area of research that has not yet been pursued.

If COI methods are to make a successful transition to non-research continuing professional development settings, understanding the affordances of each approach would allow program administrators to make informed choices related to methods and tools. This study compared the affordances of COI content analysis and student survey methods to collect data to guide improvements to practice. COI student survey and content analysis methods were applied in five online continuing professional development courses to answer the following research questions:

1. What aspects of teaching presence are measured using COI content analysis and student survey methods?
2. What are the relative affordances of teaching presence data collected using COI content analysis and student survey methods when analyzing the data to guide improvements to practice?

Literature Review

The Community of Inquiry model is a social-constructivist approach to online learning developed as a way to define, describe, and measure the elements that support a successful, collaborative higher education student learning experience (Garrison et al., 1999). The COI framework theorizes that students construct knowledge collaboratively in learning communities through the interaction of three core overlapping elements: cognitive presence, social presence, and teaching presence (Garrison et al., 1999). Cognitive presence is the extent to which learners construct meaning through ongoing reflection and discourse; social presence is the ability of students to project themselves as “real people” both socially and emotionally in online courses (Garrison et al., 1999); and, teaching presence is the design, facilitation, and direction of social and cognitive processes for the purpose of realizing educationally worthwhile outcomes (Anderson et al., 2001; Díaz, Swan, Ice, & Kupczynski, 2010).

Arguably the most essential element in a COI, the construct of teaching presence is operationalized into 25 instructor actions, or indicators, that fall into four main categories: *Course Design*, *Direct Instruction*, *Facilitating Discourse*, and *Assessment* (Anderson et al., 2001; Shea et al., 2010). *Course Design* indicators focus on communicating goals, providing clear instructions for assignments, and other elements of design that support teaching presence; *Direct Instruction* relates to how the instructor’s subject matter expertise is expressed in discussion interactions; *Facilitating Discourse* revolves around how the instructor guides effective inquiry in the discussion; and, *Assessment* relates to the instructor providing grades and or soliciting feedback. According to Garrison and Arbaugh's (2007) review of the COI framework, the research consensus is that teaching presence is a significant predictor of student satisfaction and perceived learning, and its construct provides a useful framework for providing

insights into the practice-based requirements of effective online instruction (Arbaugh et al., 2008; Bangert, 2009; Díaz et al., 2010; Swan et al., 2008). The two methods currently used to measure teaching presence in online courses are content analysis and student surveys.

Content Analysis Method

Anderson et al. (2001) introduced a content analysis coding scheme designed to identify and tabulate teaching presence indicators in text-based discussion forums. In an analysis of discussion forum transcripts from two health and education graduate courses, Anderson et al.'s (2001) exploratory study found that although the number of messages varied for each instructor, content analysis was a useful diagnostic instrument in identifying the frequency and patterns of teaching presence in instructor posts. For example, Anderson et al. (2001) noted that while one instructor had significantly fewer postings than the other, the content analysis identified more instances of different types of indicators of teaching presence as compared to the instructor that posted more frequently. Anderson et al.'s (2001) findings suggested that moving beyond frequency of instructor posts to analyzing post content may better evaluate instructor-student interactions.

Shea et al. (2010) added a new category of teaching presence, *Assessment*, and continued to refine the indicators of teaching presence to better operationalize the construct. Shea et al.'s (2010) study of two sections of an online undergraduate course also broadened the content analysis sample beyond discussions to include course content such as announcements, emails, documents, assessment feedback, and lectures. They found that 83% and 90% of indicators of teaching presence in each course were identified outside of discussion content, primarily related to *Assessment* and *Course Design* (Shea et al., 2010). These results led Shea et

al. (2010) to suggest, as had prior researchers (Anderson et al., 2001; Archer, 2010), that to get a complete assessment of teaching presence all course content needed to be analyzed. Shea et al. (2010) also suggested that because the original coding scheme was initially conceived through analysis of discussion transcripts, further research is needed on its applicability to other course content.

Student Survey Method

Because of the time and effort needed to complete a content analysis, researchers developed a student survey tool to collect data on teaching presence and other presences on a larger scale. The COI student survey tool was developed based on Anderson et al.'s (2001) coding scheme to measure selected indicators of teaching, cognitive, and social presence, and has been validated in multiple studies – it is now in its 14th version (Arbaugh et al., 2008; Swan et al., 2008). Shea, Fredericksen, et al. (2003) also created a student survey tool called the Teaching Presence Scale (TPS) to focus more specifically on measuring indicators of teaching presence, also based on Anderson et al.'s (2001) coding scheme. Miller et al. (2014), in a study of 718 teachers enrolled in an in-service online course, validated the TPS in a professional development setting and confirmed the strong correlation between teaching presence and student satisfaction. In multiple studies, the data collected using TPS and COI student survey tools also validated the three-factor construct of teaching presence (*Course Design, Direct Instruction, Facilitating Discourse; Assessment* was not included in these studies) (Arbaugh et al., 2008; Swan et al., 2008, Shea Fredericksen et al., 2003; Miller et al., 2014). Further, when Arbaugh et al.'s (2008) study applied the COI student survey tool at four institutions in graduate-level education and business courses, they identified that factor loadings related to the measurement of teaching presence were consistent with a two-dimensional orientation of items:

pre-course activities (*Course Design*) and activities occurring during the course (*Facilitating Discourse* and *Direct Instruction*). Arbaugh (2007) and Shea, Li, and Pickett (2006) identified similar results and found that the timing of activities can influence their operationalization. Specifically, they suggest that *Course Design* is operationalized pre-course and can be used for course assessment, while course activities involving instructor-student interactions (*Facilitating Discourse*, *Direct Instruction*) are operationalized during the course and should be measured post-course (Arbaugh et al., 2008; Arbaugh, 2007; Shea et al., 2006).

Guiding Improvements to Practice

Shea, Fredericksen, et al. (2003) and a related follow-up study by Shea, Pickett, & Pelz, (2003), moved beyond validating the construct of teaching presence to use the COI student survey as part of an iterative review process related to improving instructional design and faculty development. Shea, Fredericksen, et al. (2003) instructed faculty of a higher education course in teaching presence, and then administered the TPS survey to 1,150 students over several semesters to evaluate if the teaching presence of the faculty had improved. The results were used to inform faculty development and shared with faculty partners, who along with their peers, examined the need for additional improvements and then implemented revisions to instructor practice and instructional design (Shea, Fredericksen, et al., 2003; Shea, Pickett, & Pelz, 2003).

Swan et al.'s (2014) study used a collaborative, design-based approach to improve teaching presence (and other presences) and measure learning outcomes in two existing online graduate courses across four semesters ($n = 214$). They first applied the COI student survey tool to create a baseline, and then applied the Quality Matters (QM) rubric as a form of content

analysis to assess instructional design and revised the courses to meet QM standards, followed by a post-revision review. Swan et al. (2014) then applied the COI student survey tool iteratively over three semesters to collect student perceptions of practice and design and made revisions to course implementation (Swan et al., 2014). While student survey results were mixed for cognitive and social presence, ratings of teaching presence were found to increase after improvements were made based on the QM rubric and COI student survey data (Swan et al., 2014). Swan et al. (2014) indicated that a design-based two-step approach to evaluation -- using the QM rubric for course redesign and the COI student survey to identify issues and “tweak” course implementation over multiple semesters -- was more effective than each method individually, and also resulted in improved learning outcomes. Richardson et al. (2012) also suggested the COI student survey can be useful to iteratively guide instructional design revisions and other improvements related to developing a COI over the lifetime of a course.

Although both content analysis and student survey methods have been investigated as approaches to measuring teaching presence in online courses, the affordances of each approach for measuring particular aspects of teaching presence to guide practice has not been explicitly studied. This study sought to add to the literature on the application of COI methods for the purpose of guiding improvements to instructor practice by examining the affordances of both measurement approaches on their own and in contrast to each other.

Methods

In this mixed methods multiple case study, teaching presence was measured in continuing professional development courses using COI content analysis and student survey methods. The relative affordances of the resulting data for guiding improvements to instructor

practice and instructional design were then considered. This approach integrates qualitative (Anderson et al., 2001; Shea et al., 2010) and quantitative methodologies (Arbaugh et al., 2008; Miller et al., 2014; Shea et al., 2010; Shea, Fredericksen et al., 2003; Swan et al., 2008) into the method comparisons.

Context

This study measured teaching presence in five continuing professional development Public Relations Certificate program courses offered by a northeastern university between February 2015 and May 2016. The Public Relations Certificate program consists of a total of 12 online, instructor-led courses designed by instructional designers and taught by professionals in the field of public relations with extensive industry experience. All instructors had taught their respective online courses at least five times. The certificate program attracts a wide continuing professional development audience with varying levels of prior knowledge and experience from the business community, government, and higher education.

Courses were four weeks in length, contained four modules of instruction (one per week), and included a variety of learning activities, including: weekly voice-over-PowerPoint lectures by the instructor, readings, assignments, asynchronous discussion forums, and ancillary content such as links to other websites and videos. Courses were taught asynchronously online using the university's learning management system. The instructional design of the courses was informally evaluated and improved prior to initial course delivery based on the Quality Matters Rubric for professional development courses.

Participants

There were nine courses with eight instructors available within the time frame of this study and four instructors agreed to participate, for a participation rate of 50%. This resulted in

access to five courses: Advanced Public Relations Writing (Course A1 and A2), Crisis and Reputation Management (Course B), Public Relations for a Cause (Course C), and Integrated Marketing Communication (Course D). Courses A1 and A2 were taught by the same instructor one year apart and had identical instructional design and learning content; the instructor was a retired industry professional with over 10 years of teaching experience; Course B was taught by an industry professional working in administration at another university; Course C was taught by a professor at the same institution that offered the certificate program who also had industry experience; and, Course D was taught by a public relations professional at a major healthcare company.

There was a total enrollment of 59 students across the five courses, and 19 students consented to participate in the study, for a student response rate of 32%. A total of 26 student surveys were completed (Table 1), although six students were enrolled in multiple classes and completed the survey more than once. The students in the sample came from the local business community and government with varied levels of online learning experience.

Table 1

Number of Student Surveys Completed Per Course

	Course A1	Course A2	Course B	Course C	Course D	Total
# Surveys	10	6	4	4	2	26

Materials and Procedures

The COI content analysis and student survey methods used in this study to investigate teaching presence are described below along with related procedures. Both methods were based directly on a common set of indicators of teaching presence from prior COI studies (Anderson

et al., 2001; Shea et al., 2010). The indicators are introduced first, followed by the details of the two COI methods.

Teaching presence indicators. The construct of teaching presence is operationalized into 25 instructor actions, or indicators (Anderson et al., 2001; Shea et al., 2010), which are organized into four categories. For ease of reference, each indicator is labeled using a category acronym and numbered: *Assessment* (indicators AS1- AS6), *Course Design* (indicators CD1- CD6), *Direct Instruction* (indicators DI1 – DI5) and *Facilitating Discourse* (indicators FD1- FD8) (Anderson et al., 2001; Shea et al., 2010). Arbaugh et al.'s (2008) two-dimensional orientation of teaching presence measurement organizes these categories into instructional design (*Course Design* and design aspects of *Direct Instruction*) and instructor-student interactions (*Assessment*, *Direct Instruction* in the discussion, and *Facilitating Discourse*). In this study, *Direct Instruction* was found to be present in instructor-student interactions in discussions as well as in aspects of instructional design, such as instructors sharing their expertise in lecture content. For this reason, indicators of *Direct Instruction* are included in both instructional design and instructor-student interactions, as appropriate.

For the purpose of this study, there were also adjustments made to split indicators that included two distinct instructor actions (CD1, CD5, FD7, and AS2). For example, CD1, the *instructor clearly communicating course topics and goals*, was split into CD1.1 on *clearly communicating course topics* and CD1.2 on *clearly communicating course goals*. This resulted in a total of 29 indicators of teaching presence (Appendix).

Content analysis. The 29 indicators of teaching presence were used as the basis for the coding scheme (Shea et al., 2010), and the process for coding involved analyzing units and identifying and tabulating instances of indicators of teaching presence. The content analysis of

text-based course content was completed on the two courses with the highest levels of student participation within the sample, which were both Advanced Public Relations Writing (Course A1, $n = 10$; Course A2, $n = 6$). Because both courses had identical instructional design and learning content, teaching presence related to instructional design (*Course Design* and *Direct Instruction* related to design) was analyzed only in Course A1.

A total of 235 artifacts related to instructional design were coded in Course A1 (Table 2). The units of analysis for instructional design (*Course Design* and *Direct Instruction*), were either the artifact itself or a section, which was defined as one or more paragraphs on the same topic. By analyzing sections instead of paragraphs, this study made a slight departure from Shea et al.'s (2010) approach because it was determined that course pages often had multiple one-sentence paragraphs on the same topic. Each unit could be coded to multiple indicators, but multiple examples of the same code were counted once per unit.

Table 2

Content Analysis Content Types for Data Related to Instructional Design in Course A1, Units of Analysis, and Unit Counts

Instructional Design Content Types	Unit of Analysis	Course A1 Unit Count
Course Web Pages	Section	101
Documents	Entire Article, Rubric, or Template	18
Syllabus	Section	12
Lecture Slides	PPT Slide	78
Resource Videos	Video	9
Instructor Videos	30-second Segment	8
Resource Websites	Web Page	9
	Total	235

A total of 110 artifacts in Course A1 and 94 artifacts in Course A2 were coded for instructor-student interactions (*Assessment*, *Direct Instruction*, and *Facilitating Discourse*) (Table 3). The units of analysis for *Assessment* were grades and assignment feedback, and for instructor-student interactions the instructor discussion post (message), which is the standard protocol for COI researchers (Anderson et al., 2001; Shea et al., 2010). All instructor posts were analyzed because of the study's focus on improving instructor practice. A total of 419 artifacts across both courses were analyzed related to instructor-student interactions and instructional design.

Table 3

Content Analysis Content Types for Data Related to Instructor-Student Interactions in Courses A1 and A2, Units of Analysis, and Unit Counts

Instructor-Student Interaction Content Types	Unit of Analysis	Course A1 Unit Count	Course A2 Unit Count
Assignment Feedback	Instructor Feedback per Assignment	8	8
Assignment/Final Grades	Grade	12	12
Discussion Forums	Instructor Post (Message)	90	74
	Total	110	94

To determine interrater reliability, the author and a second coder experienced in content analysis research methods coded a sub-sample of the content analysis data. The sub-sample included instructor posts in four discussions and two lectures in Courses A1 and A2, which resulted in the coding of 39% of discussion post units in Course A1 (35 out of 90 posts) and

36% discussion post units in Course A2 (27 out of 74 posts); and, 24% of instructional design content in Course A1 (61 out of 235 artifacts).

To determine reliability, because multiple indicator codes could be counted for each unit, the number of ratings in agreement were calculated per unit and then divided by the highest total of ratings for that unit (by either rater). For example, if one unit was coded with a total of five indicators across both coders, and the coders matched on four of the five indicators, that would result in reliability of 80% for that unit. If we extrapolate this to all units, the reliability can be tabulated for the entire sample. A total of 433 indicators were identified with an initial interrater reliability of 43%. The coders then discussed the disagreements and collaboratively revised the indicator definitions. The same sub-sample was then re-coded and interrater reliability increased to 87%. After establishing coding reliability, the remaining units were coded by the author with these stricter indicator definitions.

Student survey. The student survey design was based on similar study protocols using teaching presence indicators as the basis for the survey (Arbaugh et al., 2008; Shea et al., 2010; Miller et al., 2014, Swan et al., 2008), and all 29 indicators of teaching presence previously described were included (Appendix). The student survey included additional statements on satisfaction related to each category of teaching presence, as well as overall satisfaction with the learning experience and instructor practice. Students were asked to rate their level of agreement with each statement using a 5-point Likert agreement scale (1= strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). The student survey was applied post-course in Courses A1 to D and took approximately 10-15 minutes to complete. It was administered electronically to all students within two weeks of course completion, with reminders sent one week and two weeks after initial distribution.

Results

The content analysis collected data on the frequency of occurrence of indicators of teaching presence in Courses A1 and A2, and the student survey collected data on the student sample's perceptions of teaching presence in all five courses. The results are presented below, including the relative affordances of each method.

Content Analysis

The results of the content analysis identified and tabulated counts of indicators of teaching presence in Courses A1 and A2, ranging from 0 to 111 for each indicator (Table 4). Although only the instructional design of Course A1 was analyzed, the same code counts applied to Course A2 because of its identical instructional design content. Any variability in code counts between the two courses were a result of the frequency of indicators related to instructor-student interactions.

Table 4

Teaching Presence Content Analysis Code Counts for Courses A1 and A2, and Student Survey Ratings for Courses A1, A2, B, C, and D, for Each Indicator Broken Out by Instructional Design and Instructor-Student Interactions

Instructional Design		Total Code Counts	Student Survey Average Student Ratings M (SD)					
Indicator Code	Descriptive Statement	Course A1 ($n=10$)	Course A1 ($n=10$)	Course A2 ($n=6$)	Course B ($n=4$)	Course C ($n=4$)	Course D ($n=2$)	All Courses
CD1.1	Clearly communicated important course topics.	21	3.9 (1.4)	4.5 (1.2)	4.0 (0.8)	4.3 (0.5)	4.5 (1.7)	4.2 (1.1)
CD1.2	Clearly communicated important course goals.	20	3.6 (1.0)	4.5 (1.2)	3.8 (0.5)	4.3 (0.5)	4.5 (1.7)	4.0 (1.0)
CD2	Provided clear instructions on how to participate in course learning activities.	111	3.2 (1.3)	4.3 (1.2)	3.6 (1.0)	4.3 (0.5)	4.5 (1.6)	3.8 (1.1)
CD3	Clearly communicated important due dates/time frames for learning activities.	41	3.9 (1.5)	4.7 (0.5)	4.0 (0.8)	4.8 (0.5)	4.5 (1.8)	4.3 (1.0)
CD4	Helped with technical issues related to participation in the course.	41	2.9 (0.9)	3.8 (1.0)	3.5 (0.6)	3.5 (1.0)	2.5 (1.3)	3.3 (0.9)
CD5.1	Provided guidance on good netiquette and acceptable online learning behavior.	1	3.4 (0.7)	4.2 (1.0)	3.8 (1.0)	4.0 (0.8)	3.5 (1.4)	3.8 (0.8)
CD6	Provided the macro-level big picture on course content.	18	4.0 (0.7)	3.8 (1.2)	4.0 (0.8)	4.3 (1.0)	3.5 (1.7)	4.0 (0.9)
DI2	Provided useful examples and insights that advanced my understanding of the topic.	51	4.2 (0.6)	4.2 (1.2)	4.3 (0.6)	4.8 (0.5)	4.0 (1.9)	4.3 (0.8)

Instructional Design		Total Code Counts		Student Survey Average Student Ratings M (SD)					
Indicator Code	Descriptive Statement	Course A1 ($n=10$)		Course A1 ($n=10$)	Course A2 ($n=6$)	Course B ($n=4$)	Course C ($n=4$)	Course D ($n=2$)	All Courses
DI3	Provided supportive demonstrations, like links to online simulations or websites.	14		3.9 (0.9)	4.3 (1.2)	4.3 (0.6)	4.0 (0.0)	4.5 (1.7)	4.1 (0.8)
DI4	Provided clarifying information.	65		3.9 (0.7)	4.2 (1.2)	4.3 (0.6)	3.8 (0.5)	3.0 (1.7)	3.9 (1.0)
DI5	Referenced outside materials and sources.	21		4.3 (0.5)	4.3 (0.8)	4.3 (0.6)	4.0 (0.0)	4.0 (1.7)	4.2 (0.6)
Instructor-Student Interactions		Total Code Counts		Student Survey Average Student Ratings M (SD)					
Indicator Code	Descriptive Statement	Course A1 ($n=10$)	Course A2 ($n=6$)	Course A1 ($n=10$)	Course A2 ($n=6$)	Course B ($n=4$)	Course C ($n=4$)	Course D ($n=2$)	All Courses
AS1	Provided ongoing (formative) feedback on my participation in discussion forums during the course.	5	5	3.7 (0.8)	4.3 (0.5)	4.0 (1.0)	4.3 (0.5)	3.0 (1.6)	4.0 (0.8)
AS2.1	Provided feedback on assignments that helped me understand my strengths and weaknesses.	15	15	4.1 (0.7)	4.3 (1.2)	4.0 (1.0)	4.0 (0.8)	4.0 (1.5)	4.1 (0.8)
AS2.2	Provided feedback on assignments in a timely manner.	13	13	3.9 (0.9)	4.7 (0.5)	4.0 (1.0)	3.6 (1.3)	2.5 (1.6)	4.0 (1.1)
AS3	Provided overall feedback (summative) on my participation in discussion forums at the end of the course.	0	0	3.4 (1.0)	3.8 (1.5)	3.7 (1.5)	4.3 (1.0)	3.0 (1.5)	3.6 (1.2)
AS4	Provided overall feedback (summative) on my performance in the course as a whole.	1	1	3.2 (1.0)	3.7 (1.5)	3.7 (1.5)	3.5 (1.0)	3.5 (1.2)	3.4 (1.2)

Instructor-Student Interactions (cont'd)		Total Code Counts		Student Survey Average Student Ratings <i>M</i> (<i>SD</i>)					
Indicator Code	Descriptive Statement	Course A1 (<i>n</i> =10)	Course A2 (<i>n</i> =6)	Course A1 (<i>n</i> =10)	Course A2 (<i>n</i> =6)	Course B (<i>n</i> =4)	Course C (<i>n</i> =4)	Course D (<i>n</i> =2)	All Courses
AS5	Solicited formative assessment on <i>Course Design</i> and learning activities from students and other participants.	0	0	3.0 (0.8)	3.0 (1.4)	3.7 (1.5)	4.0 (0.0)	4.0 (1.5)	3.3 (1.0)
AS6	Sought feedback upon completion of modules or during mid-course.	0	0	2.4 (0.8)	3.5 (1.5)	3.7 (1.5)	3.6 (0.5)	3.5 (1.3)	3.1 (1.2)
DI1	Provided valuable analogies during the discussion.	1	2	3.6 (1.1)	4.3 (0.8)	4.3 (0.6)	4.5 (0.6)	3.5 (1.9)	4.0 (1.0)
DI2	Provided useful examples and insights that advanced my understanding of the topic.	17	8	4.2 (0.6)	4.2 (1.2)	4.3 (0.6)	4.8 (0.5)	4.0 (1.9)	4.3 (0.8)
DI3	Provided supportive demonstrations, like links to online simulations or websites.	2	0	3.9 (0.9)	4.3 (1.2)	4.3 (0.6)	4.0 (0.0)	4.5 (1.7)	4.1 (0.8)
DI4	Provided clarifying information.	27	21	3.9 (0.7)	4.2 (1.2)	4.3 (0.6)	3.8 (0.5)	3.0 (1.7)	3.9 (1.0)
DI5	Referenced outside materials and sources.	3	1	4.3 (0.5)	4.3 (0.8)	4.3 (0.6)	4.0 (0.0)	4.0 (1.7)	4.2 (0.6)
FD1	Identified areas of agreement and disagreement on course topics that helped me to learn.	4	0	3.3 (0.7)	3.8 (1.2)	4.0 (0.8)	4.0 (0.8)	3.5 (1.5)	3.7 (0.9)
FD2	Guided the class towards understanding course topics in a way that helped me clarify my thinking.	27	28	3.6 (0.5)	4.2 (1.2)	4.0 (0.8)	4.3 (.50)	4.5 (1.7)	4.0 (0.8)

Instructor-Student Interactions (cont'd)		Total Code Counts		Student Survey Average Student Ratings <i>M</i> (<i>SD</i>)					
Indicator Code	Descriptive Statement	Course A1 (<i>n</i> =10)	Course A2 (<i>n</i> =6)	Course A1 (<i>n</i> =10)	Course A2 (<i>n</i> =6)	Course B (<i>n</i> =4)	Course C (<i>n</i> =4)	Course D (<i>n</i> =2)	All Courses
FD3	Reinforced the development of a sense of community among course participants.	18	11	3.9 (1.1)	4.3 (1.2)	4.3 (0.5)	4.3 (1.0)	3.0 (1.7)	4.0 (1.0)
FD4	Encouraged course participants to explore new concepts.	2	1	3.6 (0.8)	4.0 (1.1)	4.0 (0.8)	4.5 (0.6)	4.5 (1.7)	4.0 (0.9)
FD5	Kept course participants engaged and participating in productive dialogue.	11	7	4.0 (0.8)	4.5 (0.8)	4.0 (0.8)	4.3 (1.0)	3.0 (1.6)	4.1 (0.9)
FD6	Presented follow-up topics for discussion.	3	0	3.6 (0.8)	3.8 (1.2)	3.8 (1.0)	4.3 (1.0)	3.5 (1.5)	4.1 (0.9)
FD7.1	Kept course participants on task in a way that helped me to learn.	3	2	3.3 (0.7)	3.8 (1.5)	4.0 (0.8)	4.3 (.50)	3.0 (1.6)	3.7 (1.0)
FD7.2	Helped to focus discussion on relevant issues in a way that helped me to learn.	7	6	4.2 (0.6)	3.8 (1.2)	4.0 (0.8)	4.3 (.96)	3.5 (1.6)	4.0 (0.8)
FD8	Summarized discussion contributions and highlighted key concepts and relationships.	7	3	3.4 (1.4)	4.5 (0.6)	3.5 (1.3)	4.0 (1.4)	4.0 (1.5)	3.8 (1.2)

Location of teaching presence. Content analysis identified a total of 404 indicators in Course A1 related to instructional design (*Course Design* and *Direct Instruction*), and for instructor-student interactions (*Assessment*, *Facilitating Discourse*, *Direct Instruction*) there were 149 indicators identified in Course A1 and 107 in Course A2 (Table 5). *Course Design* indicators were identified 100% of the time in course instructional design and *Facilitating*

Discourse and *Assessment* indicators were identified 100% of the time in content related to instructor-student interactions. *Direct Instruction* was mixed, with 33% of indicators in Course A1, and 21% of indicators in Course A2, identified in instructor-student interactions, with the remaining indicators identified in course instructional design. Overall, in Course A1, 71% of indicator counts were identified in the instructional design of course content and 29% were identified in instructor-student interactions, while in Course A2 the percentage was 79% and 21%, respectively. While the units of analysis provided a general sense of where teaching presence was taking place, for some indicators more information on the specific location was required. For example, CD2 on *providing clear instructions on how to participate in course learning activities* – confirmation that instructions were appropriately located was necessary to guide improvements to practice.

Table 5

Content Analysis Code Counts of Teaching Presence Indicators by Category, Broken Out by Instructional Design and Instructor-Student Interactions During Courses A1 and A2

	Instructional Design	Instructor-Student Interactions		
Category of Teaching Presence	Course A1	Course A1	Course A2	Totals
Facilitating Discourse	-	82	58	140
Direct Instruction	151	50	32	233
Course Design	253	-	-	253
Assessment	-	17	17	34
Totals	404	149	107	660

Instructional design. Teaching presence indicators related to instructional design in Course A1 (*Course Design* and *Direct Instruction*) tended to have higher code counts (CD2,

111; CD3, 41; CD4, 41; DI2, 51, DI4, 65), and provided a sense of how frequently teaching presence was incorporated into course instructional design. Indicator counts related to instructional design with lower code counts were less represented in course content (CD5.1, 1; CD5.1, 21; CD5.2, 20; CD6, 18; DI3, 14; DI5, 21), but due to the lack of standardization for how frequently indicators might be expected to occur (Anderson et al., 2001), it was difficult to assign a threshold below which improvements were recommended for specific indicators without further analysis. For example, some indicators would not be expected to occur frequently, such as CD5.1 on *providing netiquette guidance*, which occurred once in Course A1. Some indicators, however, would be expected to occur frequently, such as CD2 (111) on *providing clear instructions on how to participate in course learning activities*. And, while CD2 occurred frequently, we don't know the specific locations of instances -- for example, instructions not placed in proximity to learning activities would still be counted as present, but the quality of expression could be impacted by the indicator's location. To guide improvements to practice for both low and high code counts related to instructional design, a closer look at the specific location and quality of instances of indicators of teaching presence would be beneficial.

Instructor-student interactions. Teaching presence indicators related to instructor-student interactions (*Assessment, Facilitating Discourse, Direct Instruction*) in Courses A1 and A2 all had code counts of 28 or below. These counts provided a general sense of the frequency of instructor-student interactions related to participation in discussions, grading, and feedback. Again, similar to instructional design indicators, without further analysis it was difficult to use the data to guide improvements due to a lack of standardized guidelines and information on the quality of interactions. In Course A1, the instructor was generally more involved in instructor-

student interactions in the discussions, with 132 total indicator counts as compared to 90 in Course A2. These differences, however, were possibly attributable to Course A1 having 17 students total and therefore potentially more instructor-student interactions, and Course A2 having 12 students (totals include participating and non-participating students, since all instructor posts were included in the analysis). Anderson et al. (2001) suggested that using counts of indicators of teaching presence in discussion content to evaluate instructor practice, without an understanding of the quality of expression, may not provide an accurate evaluation.

Indicators with code counts of zero (AS3, AS5, AS6, DI3, FD1, FD6) were easiest to identify as possibly in need of improvement because they did not take place; however, further analysis determined that some *Assessment* indicators were purposefully left out of the instructional design due to the courses only being four weeks in length. AS3 on *seeking student feedback upon completion of modules or mid-course*, AS5 on *soliciting formative assessment on course design and learning activities*, and AS6 on *seeking feedback upon completion of modules or during mid-course*, were all omitted from the instructional design. This finding identified the importance of customizing measurement tools to omit indicators that do not apply.

For code counts related to instructor-student interactions between 1 and 28, again, further analysis was needed to guide improvements. For example, some indicators were only expected to take place once or a few times in a course, such as AS4 on *providing overall feedback (a final grade)* which had a code count of 1. Other indicators occurred more or less frequently in different courses, but an understanding of the quality of expression was important to evaluate the results. For example, FD5 on *the instructor kept course participants engaged and participating in productive dialogue*, had a code count of 11 in Course A1 and 7 in Course

A2. However, the quality of expression of this indicator varied in instructor posts and still counted as one instance. A post with only “*Agreed. Disagree?*” and a lengthier post with “*To the heart of your question: If an entire society is ‘manipulated’ into perceiving something as having inherent value, is that value still subjective? Isn’t that a ‘culture’?*” both counted as one instance. For the instructor-student interactions in Course A1, content analysis provided only a general evaluation and further details related to quality of expression, particularly from the student’s perspective, were needed to guide practice. Finally, while specific location was important to evaluate instructional design, because instructor-student interactions occurred in discussions, grading, and assignment feedback, the location of these actions was known.

Student Survey

The results of the student survey identified student perceptions of teaching presence indicators in Courses A1 through D (Table 4). For this student sample, mean student ratings below Agree (4.0-5.0) were flagged for improvement. While no agreed-upon standards to interpret student survey results were found in the literature, Diaz et al. (2010) considered scores along a continuum in terms of prioritizing improvements by focusing on indicators with the lowest scores first, while other researchers looked for ratings to increase over time as iterative improvements were made (Swan et al., 2014). From a program perspective across all courses, mean student perception ratings for the student sample in Courses A1 through D fell within the following agreement scale ranges: 0% within the Strongly Disagree (1.0-1.9) or Disagree (2.0-2.9) ranges; 59% (17 indicators) within the Neutral (3.0-3.9) range; and, 41% (12 indicators) within the Agree (4.0-5.0) range (Table 6).

Table 6

Percent of Mean Student Indicator Ratings for Course A1 Through D by Likert-scale Ranges by Category of Teaching Presence; Mean Ratings Below Agree (4.0-5.0) Flagged for Improvement

Category of Teaching Presence	Strongly Disagree (1.0-1.99)	Disagree (2.0-2.99)	Neutral (3.0-3.99)	Agree/ Strongly Agree (4.0-5.0)
<i>Course A1</i>				
<i>Facilitating Discourse</i>			78% (7)	22% (2)
<i>Direct Instruction</i>			60% (3)	40% (2)
<i>Course Design</i>		12.5% (1)	75% (6)	12.5% (1)
<i>Assessment</i>		14.5% (1)	71% (5)	14.5% (1)
<i>Course A2</i>				
<i>Facilitating Discourse</i>			44% (4)	56% (5)
<i>Direct Instruction</i>				100% (5)
<i>Course Design</i>			37.5% (3)	62.5% (5)
<i>Assessment</i>			57% (4)	43% (3)
<i>Course B</i>				
<i>Facilitating Discourse</i>			22% (2)	78% (7)
<i>Direct Instruction</i>			20% (1)	80% (4)
<i>Course Design</i>			62.5% (5)	37.5% (3)
<i>Assessment</i>			57% (4)	43% (3)
<i>Course C</i>				
<i>Facilitating Discourse</i>				100% (9)
<i>Direct Instruction</i>			20% (1)	80% (4)
<i>Course Design</i>			25% (2)	75% (6)
<i>Assessment</i>			57% (4)	43% (3)
<i>Course D</i>				
<i>Facilitating Discourse</i>			67% (6)	33% (3)
<i>Direct Instruction</i>			40% (2)	60% (3)
<i>Course Design</i>		25% (2)	25% (2)	50% (4)
<i>Assessment</i>		14% (1)	57% (4)	29% (2)

Instructional design. Student ratings of indicators of teaching presence related to instructional design (*Course Design* and *Direct Instruction*) provided subjective student perceptions, but no information on quality or location. CD4 on *helping with technical issues*, was one of the lowest rated instructional design indicators at a mean rating of 3.3 for all courses. and DI2 on *providing useful examples and insights* was rated the highest at 4.3. While

student ratings were a useful starting point to determine student perceptions of instructional design, additional research was needed to determine whether ratings below the 4.0 threshold indicated a lack of indicator presence or poor quality of expression.

Instructor-student interactions. Student ratings related to instructor-student interactions were useful to guide improvements to practice related to *Facilitating Discourse*, *Direct Instruction*, and *Assessment*, particularly because the locations of these interactions were known to be in discussions, grades, and feedback. Some of the lowest rated indicators were in the category of *Assessment*, with means below 4.0 (Agree) ranging from 3.1 to 3.6 for the five courses (AS6, AS5, AS4, AS3). *Direct Instruction* had some of the highest ratings with only one indicator rating at 3.9 (DI4), and *Facilitating Discourse* had three ratings below the threshold of 4.0 (FD1, FD7.1, FD8). As with instructional design, further research was needed to determine if students perceived these indicators did not take place, or, if students were reacting to the quality of expression.

Open-Ended Survey Questions

Open-ended question data were reviewed and collated by category of teaching presence to provide individually to each instructor. For example, responses related to *Assessment* provided more specific detail around the type of feedback students in the sample would like on assignments (AS2.1) and generally mirrored student ratings around assignment response times (AS2.2); for *Course Design*, clearer assignment instructions were requested (CD2); and, for *Direct Instruction*, more examples (DI2) and instruction on writing styles and framing and communication of key messages (DI2, DI3, DI4) were requested; finally, for *Facilitating Discourse*, a request for more thought-provoking discussion prompts (FD2) was made. The data also provided helpful feedback that the student survey items didn't capture – such as

specific suggestions for improving assignments, widening the range of writing topics with a suggested list, and requests for sample assignments. Open-ended student survey data were particularly helpful to provide more specific detail around indicator ratings and provided an opportunity for students to offer suggestions and critiques that would have not been captured otherwise.

The affordances of content analysis and student survey methods were complementary. Content analysis data provided an objective measurement of where and how frequently teaching presence took place in Course A1, and was particularly useful for evaluating indicators related to instructional design. A limitation of content analysis was the emphasis on quantity over quality and a lack of frequency standards. To guide improvements to practice, further evaluation of the quality of expression and specific location of indicators in the course were necessary. The affordances of the student survey were that it collected student perceptions of presence and quality of expression of teaching presence, which were particularly useful to evaluate instructor-student interactions, and the absolute scale more easily identified indicators in need of improvement. A limitation of the student survey data was the lack of data on frequency of instances or location of teaching presence related to instructional design; however, locations were known for indicators taking place in discussions, grades, and feedback. Overall, it was difficult to determine if student indicator ratings below 4.0 (Agree) identified a perceived lack of presence, quality of expression, or both.

Discussion

A better understanding of the affordances of content analysis and student survey methods provided additional insights into how to best measure teaching presence related to instructional design and instructor-student interactions. Although not generalizable across all

professional development audiences, based on the results of this study, I consider below how COI methods might be modified and transitioned from a research context to practice in continuing professional development settings.

Measuring Instructional Design

In the content analysis of Course A1, 71% of instances of teaching presence were coded in instructional design in the *Course Design* and *Direct Instruction* categories, and in Course A2, 79%. Because of the fairly large amount of teaching presence embodied in instructional design, this suggests the importance of effective evaluation. When considered separately, content analysis and student survey data presented an incomplete picture of teaching presence in instructional design. Content analysis code counts were challenging to interpret due to the lack of standards -- low code counts for certain indicators did not necessarily mean improvements were needed or that the expression of the indicator was of poor quality, and high counts were not a confirmation of the quality of expression or its appropriate location in the course design. Student surveys were also difficult to interpret because low ratings related to instructional design could either be a result of lack of presence, poor quality of expression, or both; and, high ratings may not reflect an objective determination of actual teaching presence in a course.

For example, CD5.1, on *providing guidance on good netiquette and acceptable online behavior*, which occurred once in Course A1, as might be expected for this type of information. Students rated this indicator as 3.4 (Neutral) in Course A1 and in Course A2 at 4.2. The information on netiquette was objectively identified as present in the course design, but we don't specifically know if it was in the optimal location. Students in Course A1 may be responding to a lack of presence because they didn't see the guidance, or, they may perceive

the guidance was of poor quality. A similar dichotomy can be found related to the results for CD2 on *providing clear instructions on how to participate in course learning activities*. CD2 occurred 111 times, but students in Course A1 rated this indicator at 3.2 and students in Course A2 at 4.3. For these examples, students in both courses were provided with the exact same expression of teaching presence in instructional design, yet in some cases they perceived these indicators differently and we don't know if the differences related to quality, presence, or both.

So, how can we use the affordances of both content analysis and student surveys to best measure instructional design? If we can objectively confirm indicators are present in the instructional design in expected locations, and we've reviewed the quality of expression based on best practices, we can use the student survey data to confirm the quality rather than the presence of teaching presence in instructional design. A modified analysis using a guided *pre-course rubric* to confirm the presence, specific location, and expected expression of indicators of teaching presence related to instructional design prior to course delivery may be a practical and useful alternative to traditional COI methods. Using a *pre-course rubric* would also allow improvements to be made to instructional design before course delivery. A modified *post-course student survey* administered iteratively after each course would collect student perceptions of the quality of some of the more subjective aspects of instructional design, such as clarity of instructions, to provide additional information to guide practice.

As an example of this approach, for CD2 on *providing clear instructions on how to participate in course learning activities*, the guided *pre-course rubric* could direct evaluators to the location of assessment and discussion instructions in the course and confirm if the instructional design:

- Provides step-by-step guidelines for assignments, including purpose, expectations, instructions, grade/point value, and how to submit assignments or participate in discussions?
- Includes a rubric and examples of assignments/discussions to enhance student understanding of the assignment or discussion's requirements?

The modified *post-course student survey* could ask students to rate their agreement with the following statement using a 5-point Likert agreement scale:

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

Using the affordances of both methods, we can objectively confirm the appropriate location and quality of CD2 in instructional design, and then focus student feedback on their perceptions of the quality of expression of CD2 in order to make iterative improvements.

Measuring Instructor-Student Interactions

Instructor-student interactions were 29% of the teaching presence instances in Course A1, and 21% in Course A2, in the categories of *Assessment*, *Direct Instruction*, and *Facilitating Discourse*. Code counts of indicators tended to be low for Course A1 and A2 (below 28) and were difficult to evaluate due to a lack of standards. Low or high code counts for indicators did not intrinsically imply poor or better quality of expression, particularly since each instance counted could have varying degrees of quality per unit. Student perceptions, however, provided useful data on the quality of interactions from the student's perspective and the absolute scale was helpful to identify indicators in need of improvement. As well, since we already know instructor-student interactions take place in discussions, grades, and feedback, further information about location was not necessary.

For example, FD2 on *guiding the class towards understanding course topics in ways that helped clarify student thinking*, was rated at or above Agree (4.0 – 4.5) in Courses A2, B, C, and D indicating no need for improvement from the student’s perspective. However, in Course A1, FD2 was rated at 3.6 – and, interestingly, the code count for FD2 in this course was 27 and the count in Course A2 with the higher rating (4.2) was 28. So, even though the code counts were similar, student perceptions of the quality of the instructor-student interactions varied. As well, in the case of DI2 on *providing valuable analogies during the discussion*, which occurred in Course A1 17 times and in Course A2 eight times, although the code counts varied by nine instances, students rated their perceptions of this indicator in both courses at 4.2 (Agree), indicating no need for improvement. AS1, on *providing ongoing feedback on student participations in discussions*, occurred only five times in Course A1 and was rated at 3.7 (Neutral) indicating a need for improvement, and also occurred five times in Course A2 and was rated 4.3 (Agree). Because higher code counts did not consistently result in higher student perceptions of presence and quality, student perceptions were more useful to guide improvements to practice than code counts. However, it would be beneficial to the evaluation to objectively confirm the instructor generally participated in discussions and other instructor-student interactions.

To best measure instructor-student interactions and take advantage of the affordances of both content analysis and the student survey, using a modified *post-course student survey* to provide student perceptions of the quality of instructor-student interactions and a guided *post-course rubric* to confirm certain instructor-student interactions took place in a course (rough estimate of quantity) would provide adequate information to guide improvements to practice. Objective confirmation of certain instructor-student interactions at a high level, such as if

instructors generally participated in discussions or provided grades and feedback, would be beneficial because student ratings can sometimes be influenced by how well students like the instructor (Shevlin, Banyard, Davies, & Griffiths, 2000). The *post-course rubric* and *post-course student survey* would be applied after each course to guide iterative improvements to practice.

As an example of this approach, the *post-course student survey* could ask student to rate their agreement with the following statements related to FD1 and FD2:

- The instructor identified areas of agreement and disagreement on course topics in the discussion in ways that helped me to learn. [FD1]
- The instructor guided the class towards understanding course topics in the discussion in ways that helped me clarify my thinking. [FD2]

The *post-course rubric* could direct evaluators to review discussion instructor posts at a high level to determine:

- Did the instructor actively participate in discussions and guide inquiry appropriately based on best practices?
- Did the instructor share discussion summaries/highlights with students?

Using the affordances of both methods, we can determine student perceptions of the quality of instructor-student interactions in the discussion. And, because student perceptions are not always reliable, we can also objectively confirm the instructor participated in the discussion as expected.

A mixed methods approach to evaluating teaching presence builds on the affordances of both content analysis and student surveys, and provides data that can be used to guide improvements to instructional design and instructor-student interactions (Table 7). Objectively

evaluating teaching presence related to instructional design for specific location, quantity, and quality of *Course Design* and *Direct Instruction* prior to course delivery may be best done using a modified content analysis in the form of a guided *pre-course rubric*, with the more subjective aspects of instructional design evaluated in a *post-course student survey*. For instructor-student interactions related to *Facilitating Discourse*, *Assessment*, and *Direct Instruction*, the student survey may best evaluate student perceptions of these interactions, while the *post-course rubric* objectively confirms certain key instructor actions took place for a rough estimate of quantity. These complementary, practical approaches to measuring and evaluating teaching presence in continuing professional development courses are offered as a starting point for providers who want to improve instructor practice and increase student satisfaction. Based on the results of this study and my own research on best practices, I developed a *Teaching Presence Evaluation Toolkit* that includes first versions of the *pre-course rubric*, *post-course student survey*, and *post-course rubric*. I invite you to view the toolkit, as well as a course for instructors I designed on how to improve teaching presence, titled *Improving Teaching Presence in Online Courses*.

Table 7

Suggestions Based on the Results of this Study for Best Measurement Approaches for Categories of Teaching Presence Related to Instructional Design and Instructor-Student Interactions

Measurement Category	Method	Location	Quantity	Quality
Instructional Design (CD, DI)	Pre-Course Rubric (before course delivery)	Specific location	Quantity related to location	Objective perceptions of quality
	Post-Course Student Survey (every course iteration)			Student perceptions of quality
Instructor-Student Interactions (FD, AS, DI)	Post-Course Rubric (every course iteration)	Discussions, grades, and feedback	Objective confirmation of high-level presence of key indicators	
	Post-Course Student Survey	Discussions, grades, and feedback		Student perceptions of quality

Limitations

This multiple case study had small student, instructor, and course sample sizes, and for this reason the results are exploratory in nature. Having more Public Relations Certificate Program courses to analyze that qualitatively differed with respect to instructor practice – with variations of strong, weak, and mediocre instructor practice – would better position the research to identify aspects of teaching presence for which the content analysis and student survey were doing a particularly good job identifying areas in need of improvement. Using content analysis and student survey methods iteratively across several courses to identify areas where methods align and diverge would further hone in on the aspects of teaching presence each are best positioned to measure.

The lack of research on comparing the affordances of student survey and content analysis methods in collecting teaching presence data to guide improvements was also a limitation, as was the very limited research on the expression of teaching presence in instructional design. As well, limiting the scope of the study to teaching presence also omits the other two key elements of the Community of Inquiry model, cognitive presence and social presence, which, if measured, might identify other improvements that could impact student satisfaction.

Conclusion

Many continuing professional development programs continue to rely on student satisfaction surveys to evaluate the broad construct of satisfaction. However, asking students questions, such as “How would you rate the instructor’s practice during this course?” or “Were you satisfied with your learning experience?” does not provide actionable data to guide

improvements to instructor practice. Because of the strong correlation between teaching presence and student satisfaction, shifting the focus to collecting and evaluating teaching presence can provide data to guide improvements to both instructional design and instructor-student interactions. The Community of Inquiry's construct of teaching presence and related methods have been applied by researchers for almost 20 years in higher education courses (Garrison et al., 1999), and more recently to professional development courses. Further study is needed, however, to better understand the expression of teaching presence in instructional design and how to best apply COI methods iteratively to continuously improve practice (Garrison, 2017; Richardson et al., 2012). With minor modifications to benefit from the affordances of COI methods, however, these approaches can make a successful transition to continuing professional development settings.

Appendix

Student Survey

The student survey shown below is condensed from the original electronic version to save space, and for ease of reference the code for each indicator is included in brackets.

Student Survey

1. Please rate your level of agreement with the statements below. [1=Strongly Disagree, 2=Disagree, 3=Neither Agree nor Disagree, 4=Agree, and 5=Strongly Agree]
 - a. Overall, I was satisfied with my learning experience in this course.
 - b. Overall, I was satisfied with the quality of instructor practice experienced in this course.
2. Please read each statement below about instructor activities related to [category] in the course you just attended and rate your level of agreement with each statement. [1=Strongly Disagree, 2=Disagree, 3=Neither Agree nor Disagree, 4=Agree, and 5=Strongly Agree]

Course Design [CD]

- a. The instructor clearly communicated important course topics. [CD1.1]
- b. The instructor clearly communicated important course goals. [CD1.2]
- c. The instructor provided clear instructions on how to participate in course learning activities. [CD2]
- d. The instructor clearly communicated important due dates/time frames for learning activities. [CD3]
- e. The instructor helped with technical issues related to participate in the course. [CD4]
- f. The instructor provided guidance on good netiquette and acceptable online learning behavior. [CD5.1]
- g. The instructor addressed any issues related to netiquette in a timely manner. [CD5.2]
- h. The instructor provided the macro-level big picture on course content. [CD6]
- i. Overall, I was satisfied with the instructor's *Course Design* and organization of this course.

- j. Please describe what you thought was effective about the instructor's *Course Design* and organization of this course? [open-ended]
- k. Please describe what you thought could be improved about the instructor's *Course Design* and organization of this course? [open-ended]

Direct Instruction [DI]

- a. The instructor provided valuable analogies during the discussion. [DI1]
- b. The instructor provided useful examples and insights that advanced my understanding of the topic. [DI2]
- c. The instructor provided supportive demonstrations, likes links to online simulations or websites. [DI3]
- d. The instructor provided clarifying information. [DI4]
- e. The instructor referenced outside materials and sources. [DI5]
- f. Overall, I was satisfied with the instructor's *Direct Instruction* in this course.
- g. Please describe what you thought was effective about the instructor's *Direct Instruction* of this course? [open-ended]
- h. Please describe what you thought could be improved about the instructor's *Direct Instruction* of this course? [open-ended]

Facilitating Discourse [FD]

- a. The instructor identified areas of agreement and disagreement on course topics that helped me to learn. [FD1]
- b. The instructor guided the class towards understanding course topics in a way that helped me clarify my thinking. [FD2]
- c. The instructor's actions reinforced the development of a sense of community among course participants. [FD3]
- d. The instructor encouraged course participants to explore new concepts. [FD4]
- e. The instructor kept course participants engaged and participating in productive dialogue. [FD5]
- f. The instructor presented follow-up topics for discussion. [FD6]
- g. The instructor kept course participants on task in a way that helped me to learn. [FD7.1]
- h. The instructor helped to focus discussion on relevant issues in a way that helped me to learn. [FD7.2]
- i. The instructor summarized discussion contributions and highlighted key concepts and relationships. [FD8]

- j. Overall, I was satisfied with the instructor's facilitation of discourse in this course.
- k. Please describe what you thought was effective about the instructor's facilitation of discourse in this course? [open-ended]
- l. Please describe what you thought could be improved about the instructor's facilitation of discourse in this course? [open-ended]

Assessment [AS]

- a. The instructor provided ongoing (formative) feedback on my participation in discussion forums during the course. [AS1]
 - b. The instructor provided feedback on assignments that helped me understand my strengths and weaknesses. [AS2.1]
 - c. The instructor provided feedback on assignments in a timely manner. [AS2.2]
 - d. The instructor provided overall feedback (summative) on my participation in discussion forums at the end of the course. [AS3]
 - e. The instructor provided overall feedback (summative) on my performance in the course as a whole. [AS4]
 - f. The instructor solicited formative *Assessment on Course Design* and learning activities from students and other participants. [AS5]
 - g. The instructor sought feedback upon completion of modules or during mid-course. [AS6]
 - h. Overall, I was satisfied with instructor's feedback in this course.
 - i. Please describe what you thought was effective about the instructor's *Assessment* in this course? [open-ended]
 - j. Please describe what you thought could be improved about the instructor's *Assessment* in this course? [open-ended]
3. What do you feel most impacted your overall satisfaction with your learning experience in this course? [open-ended]
4. What additional comments do you have about your learning experience in this course? [open-ended]

Chapter 3: Teaching Presence Evaluation Toolkit

This is a Word version of the online *Teaching Presence Evaluation Toolkit*. Effort was made to insert graphics to make this version look as similar as possible to the elearning version, with notations related to any interactivity not possible to capture in Word. Sections and pages are noted in [brackets].

Home Page [Page]



The *Teaching Presence Evaluation Toolkit* is designed as a resource for program administrators of online, instructor-led continuing professional development courses, to assist them to measure and evaluate instructor practice and instructional design to guide program improvements. Click the *Start Here* button above to begin.

Introduction [Page]

The *Teaching Presence Evaluation Toolkit* provides a comprehensive approach to measuring and evaluating instructor practice and instructional design in online continuing professional development online courses based on the Community of Inquiry's construct of teaching presence. While traditional student satisfaction surveys are often too general to collect actionable data on instructor practice, higher education online programs have been measuring and evaluating teaching presence for almost 20 years. In this toolkit, we seek to transition these methods and approaches to continuing professional development settings for use by program administrators to guide iterative improvements to instructional design and instructor-student interactions related to teaching presence.



The toolkit starts with an overview of the Community of Inquiry model and teaching presence, followed by a description of suggested measurement tools, including a *Pre-course rubric* focused on improving instructional design, a *post-course student survey* to collect student perceptions, and a *post-course rubric* to confirm that instructor-student interactions expected to take place in a course actually occurred. We will also consider how to present teaching presence data to instructors and designers using the *Instructor Scorecard*, and how to use the data to guide improvements to practice and design, ultimately creating a cycle of continuous improvement.

The *Teaching Presence Evaluation Toolkit* is organized into three sections:

- **Communities of Inquiry & Teaching Presence**
An introduction to the Community of Inquiry model and its construct of teaching presence, and a description of the methods and tools currently in use in higher education.
- **How to Measure Teaching Presence**
Suggested *pre-* and *post-course rubrics* and survey measurement tools to evaluate teaching presence related to instructor-student interactions and instructional design in continuing professional development courses.
- **Making Sense of the Data**
The *Instructor Scorecard* assists instructors and instructional designers to evaluate teaching presence data in order to guide improvements to practice and design, as part of a cycle of continuous improvement.

About the Author



Jen Chingwe is a doctoral student at the Rutgers University Graduate School of Education. Her professional experience in talent development and instructional design ranges from corporate training, to higher and K-12 education, to government adult education programs, with an emphasis on e-learning and designing online learning environments. Jen currently works as an instructional designer and project manager for a talent management consulting company. She also teaches an online undergraduate course, Education & Computers, at Rutgers University.

The suggestions in this toolkit were developed based on the results of Jen's dissertation research – a mixed methods multiple case dissertation study that measured and evaluated instructor practice in five online continuing professional development courses. As part of this study, consideration was given to how existing COI data collection and evaluation methods and tools might be adapted for use in continuing professional development settings. This toolkit also reflects the professional experience of the researcher and her perspective as a doctoral student in the Design of Learning Contexts.

The methods and approaches outlined in this toolkit add to a community of practice using COI measurement tools in various educational settings. You are invited to try these methods and contact the author with feedback, suggestions, or questions. Please email Jen Chingwe at jchingwe@rutgers.edu.

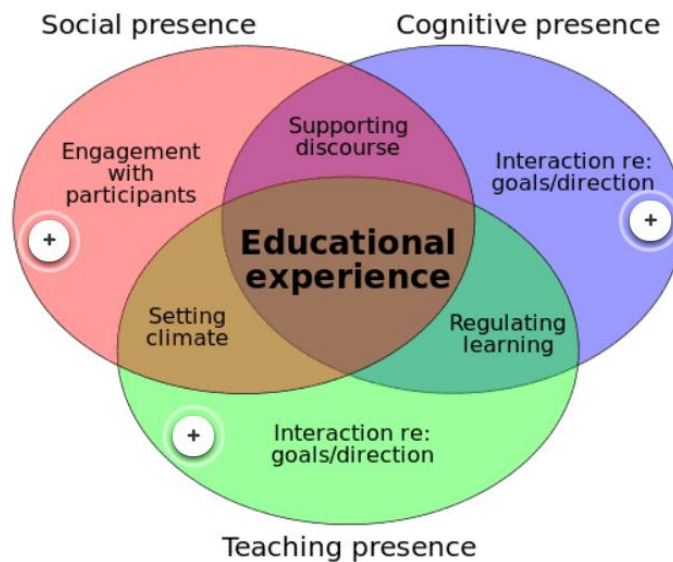
Communities of Inquiry and Teaching Presence [Section]

What is a Community of Inquiry? [Page]


Over the last twenty years, there have been some exciting developments related to measuring, evaluating, and improving instructor practice in higher education online courses using the Community of Inquiry (COI) model and its construct of teaching presence. A COI is a model of online learning that defines, describes, and measures the elements that support a worthwhile learning experience. The COI framework represents a process of creating a deep and meaningful collaborative, constructivist learning experiences through the development of three interdependent elements: social, cognitive, and teaching presence (coi.athabasca.ca). Continuing professional development programs may benefit from using COI methods and tools to measure and evaluate teaching presence in order to guide improvements to instructor practice and instructional design.

[Interactive graphic; videos will only play in e-learning version]

Click on the markers below to learn more about each presence in the COI framework. Click on videos to enlarge.




Social Presence



Alexandra Pickett Reflect...

Social presence is "the ability of participants to identify with the community (e.g., course of study), communicate purposefully in a trusting environment, and develop inter-personal relationships by way of projecting their individual personalities." (Garrison, 2009) (coi.athabascau.ca)


Teaching Presence



Teaching Presence in Onli...

Teaching Presence is the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes (Anderson, Rourke, Garrison, & Archer, 2001). (Coi.athabascau.ca)

Cognitive Presence



Model of Cognitive Presence

Coi The Cognitive Presence...

Cognitive Presence is the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse (Garrison, Anderson, & Archer, 2001). (coi.athabascau.ca)

Video embed code:

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frameborder="0" allow="autoplay; encrypted-media" allowfullscreen></iframe>
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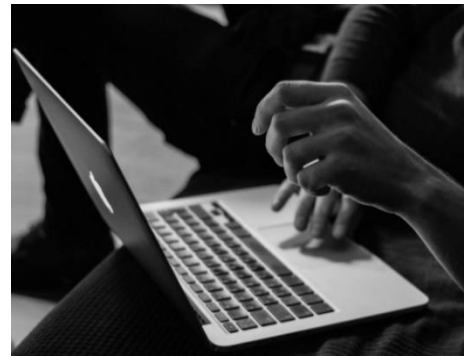
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Defining Teaching Presence [Page]

The Community of Inquiry model's construct of teaching presence provides a useful framework for providing insights into the practice-based requirements of effective online instruction. The 25 operationalized instructor actions, known as indicators, are organized into four categories: *Course Design*, *Direct Instruction*, *Facilitating Discourse*, and *Assessment*. *Course Design* indicators focus on communicating goals, providing clear instructions for assignments, and other elements of design that support teaching presence; *Direct Instruction* relates to how the instructor's subject matter expertise is expressed in course content and discussion interactions; *Facilitating Discourse* revolves around how the instructor guides effective inquiry in the discussion; and *Assessment* relates to the instructor providing grades and feedback. Teaching presence is arguably the most essential element in a COI because it impacts almost all aspects of the student experience and is also a significant predictor of student satisfaction and perceived learning.

When measuring teaching presence, indicators tend to relate to either instructional design or instructor-student interactions. In the study behind this toolkit, I found that 100% of teaching presence related to *Course Design* is expressed in the instructional design of a course, and *Facilitating Discourse* and *Assessment* occur 100% of the time in instructor-student interactions during a course. *Direct Instruction* was a mix of both, with more instances tending to occur instructional design. While instructional design can support more effective instructor-student interactions related to teaching presence, specific design guidelines for such an approach is an area in need of further study.



Click on the tabs below for additional details about each category of teaching presence. Indicators are numbered for ease of reference.

[Interactive tabs are broken out below]

COURSE DESIGN	DIRECT INSTRUCTION	FACILITATING DISCOURSE	ASSESSMENT
<p><i>Course Design</i> includes elements of instructional design that support teaching presence.</p> <p><i>"Building the course in a digital format forces teachers to think through the process, structure, evaluation and interaction components of the course....the teacher is forced to be more explicit and transparent in their planning process. (Anderson, Rourke, Garrison, & Archer, 2001)</i></p> <p>Below is a list of the six indicators of teaching presence that fall under <i>Course Design</i>.</p> <ul style="list-style-type: none"> • CD1: The instructor clearly communicates important course topics and goals. • CD2: The instructor provides clear instructions on how to participate in course learning activities. • CD3: The instructor clearly communicates important due dates/time frames for learning activities. • CD4: The instructor helps with technical issues related to participation in the course. • CD5: The instructor provides guidance on good netiquette and acceptable online learning behavior, and addressed any issues related to netiquette in a timely manner. • CD6: The instructor provides the macro-level big picture on course content. 			

COURSE DESIGN	DIRECT INSTRUCTION	FACILITATING DISCOURSE	ASSESSMENT
<p><i>Direct Instruction</i> involves instructors sharing their subject matter expertise and is expressed in both instructional design and instructor-student interactions.</p> <p><i>"Teachers provide intellectual and scholarly leadership and share their subject matter knowledge with students. The students and the teacher have expectations of the teacher communicating content knowledge....The role of the teacher, in any context, involves direct instruction that makes use of the subject matter and pedagogical expertise of the teacher." (Anderson, Rourke, Garrison, & Archer, 2001)</i></p> <p>Below is a list of the five indicators of teaching presence that fall under <i>Direct Instruction</i>.</p> <ul style="list-style-type: none"> • DI1: The instructor provides valuable analogies during the discussion. • DI2: The instructor provides useful examples and insights that advanced my understanding of the topic. • DI3: The instructor provides supportive demonstrations, like links to online simulations or websites. • DI4: The instructor provides clarifying information. • DI5: The instructor references outside materials and sources. 			

COURSE DESIGN	DIRECT INSTRUCTION	FACILITATING DISCOURSE	ASSESSMENT
<p><i>Facilitating Discourse</i> guides productive student inquiry in the discussion and is expressed in instructor-student interactions.</p> <p><i>"Facilitating discourse during the course is critical to maintaining the interest, motivation and engagement of students in active learning. We use the term discourse rather than discussion to highlight the focused and sustained deliberation that marks learning in a community of inquiry..." (Anderson, Rourke, Garrison, & Archer, 2001)</i></p> <p>Below is a list of the eight indicators of teaching presence that fall under <i>Facilitating Discourse</i>.</p> <ul style="list-style-type: none"> • FD1: The instructor identifies areas of agreement and disagreement on course topics that helped me to learn. • FD2: The instructor guides the class towards understanding course topics in a way that helped me clarify my thinking. • FD3: The instructor's actions reinforce the development of a sense of community among course participants. • FD4: The instructor encourages course participants to explore new concepts. • FD5: The instructor keeps course participants engaged and participating in productive dialogue. • FD6: The instructor presents follow-up topics for discussion. • FD7: The instructor keeps course participants on task and focused discussions on relevant issues in ways that helped me to learn. • FD8: The instructor summarizes discussion contributions and highlighted key concepts and relationships. 			

COURSE DESIGN	DIRECT INSTRUCTION	FACILITATING DISCOURSE	ASSESSMENT
<p><i>Assessment</i> guides instructional design and practice related to assignment and discussion forum feedback and is expressed in instructor-student interactions.</p> <p><i>Assessment "include[s] both formative and summative assessment across a broad range of instructor and student activities that occur within an online course.... Two areas were closely identified with individual student assessment...participation in discussions and the completion of individual assignments." (Shea, Vickers, & Hayes, 2010)</i></p> <p>Below is a list of the six indicators of teaching presence that fall under <i>Assessment</i>.</p> <ul style="list-style-type: none"> • AS1: The instructor provided ongoing (formative) feedback on my participation in discussion forums during the course. • AS2: The instructor provided feedback on assignments that helped me understand my strengths and weaknesses. • AS3: The instructor provided feedback on assignments in a timely manner. • AS4: The instructor provided overall feedback (summative) on my participation in discussion forums at the end of the course • AS5: The instructor provided overall feedback (summative) on my performance in the course as a whole. • AS6: The instructor solicited formative assessment on course design and learning activities from students and other participants. 			

In the next section, we will consider effective methods of measuring teaching presence in online courses. For a more in-depth consideration of each indicator of teaching presence, including examples and best practices for expressing teaching presence in instructional design and instructor-student interactions, you are invited to review the course developed for instructors on *Improving Teaching Presence in Online Courses*.

A Closer Look: Why Focus on Teaching Presence?



Student satisfaction with instructor practice, or teaching presence, is one of the greatest predictors of student satisfaction. The online continuing professional development market is growing rapidly, and providers that focus on instructor practice to improve student satisfaction may benefit from preferred program outcomes such as: student success, retention, persistence, pursuing additional online courses, and recommending courses to others.

How to Measure Teaching Presence [Section]

A Cycle of Continuous Improvement [Page]

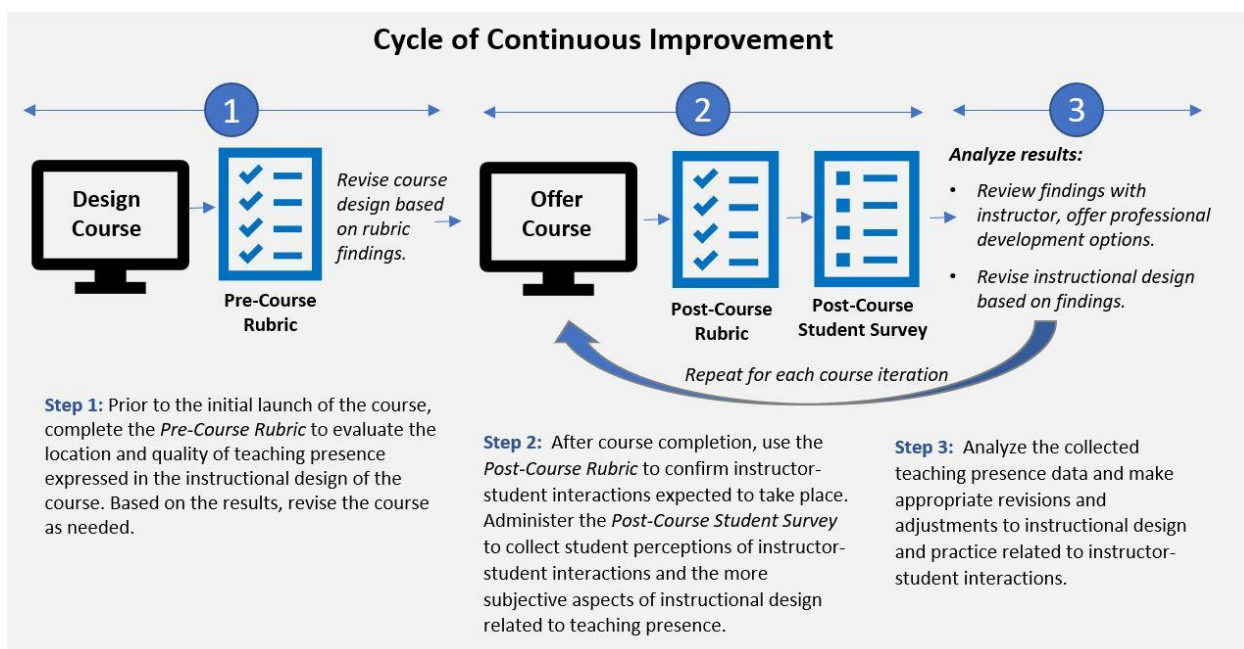
Teaching presence can be measured objectively using *pre-* and *post-course rubrics* administered by program administrators, and subjectively with a *post-course student survey* to collect student perceptions and feedback. The *pre-course rubric* confirms teaching presence is appropriately represented in the instructional design of a course before it is offered to students. The *post-course student survey* collects student feedback on subjective instructor-student interactions, and the *post-course rubric* objectively confirms expected instructor-student interactions took place during the course.

The pros/cons infographic below identifies why using both rubrics and a survey data are complementary and provide a broader range of data to evaluate teaching presence and guide improvements to practice.

Course Rubrics		Student Survey Tool	
Pros	Cons	Pros	Cons
Easily administered by program administrators for an objective evaluation of the expression of teaching presence in instructional design and instructor-student interactions.	Does not collect student perceptions of instructor-student interactions or aspects of instructional design that can be subjectively perceived by students. Program administrators will need to set aside time to complete the rubrics.	Easily administered electronically to students to collect student perceptions of instructor-student interactions.	Student perceptions are subjective and may not reflect what is actually taking place in the course. Some students may not complete the survey.
Pre-course rubrics confirm the location and quality of expression of teaching presence related to instructional design.		Post-course survey data is simple to interpret using statistics, such as calculating averages and percentages.	
Post-course rubrics confirm key instructor-student interactions took place.		An open-ended question provides direct feedback to instructor on student perceptions.	

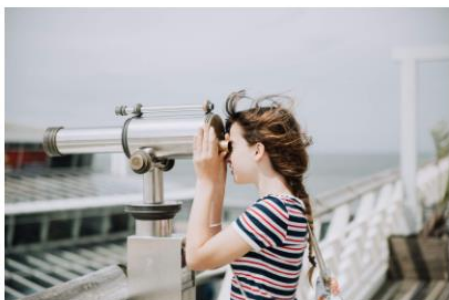
The suggested teaching presence data collection approaches and time frames create an iterative cycle of continuous improvement. The infographic below describes the cycle in three steps.

Step 1 involves using a *pre-course rubric* to evaluate instructional design and is typically done prior to launching a new course, while Steps 2 and 3 are iterative and applied each time the course is offered. The measurement tools are designed to work together to provide a complete evaluation of teaching presence in a course related to both instructional design and instructor-student interactions. A course on *Improving Teaching Presence in Online Courses* has been created for instructors to assist them to apply teaching presence best practices to instructional design and instructor-student interactions.



In the next section, more information will be provided on the *pre-* and *post-course rubrics* and *post-course student survey*.

A Closer Look: Measuring Teaching Presence



For almost 20 years, COI researchers have jointly developed, validated, and refined student survey and content analysis measurement tools to collect data on teaching presence in higher education courses. In 2001, a content analysis coding scheme based on 18 indicators to identify teaching presence in online higher education courses was developed and validated. The coding scheme initially identified and tabulated instances of teaching presence in text-based discussion forums to get a sense of the presence of each indicator in a course.

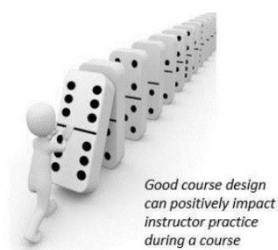
Recently, researchers have begun to analyze entire courses to obtain a more complete picture of teaching presence. In my study of teaching presence in five continuing professional development courses, in the two courses that I analyzed the course content in depth, I found that approximately 75% of instances of teaching presence were identified in course content outside of the discussions.

The COI approach to content analysis has gone through multiple iterations since Anderson, Rourke, Garrison, and Archer's (2001) original 18 indicators - most notably recent modifications by Shea, Hayes, and Vickers (2010) that added the category of *Assessment*, bringing the number of indicators up to 25. To study teaching presence on a larger scale,

researchers also developed a *post-course student survey* based on the coding scheme to collect student perceptions of teaching presence (Miller, Hahs-Vaughn, & Zygoris-Coe, 2014; Shea, Pickett, & Pelz, 2003; Arbaugh et al., 2008).

The *pre-* and *post-course rubrics* and the *post-course student survey* in this toolkit are all based on the COI coding scheme.

Pre-Course Rubric [Page]



The *pre-course rubric* is designed to be administered by a program administrator during the final stage in the instructional design process. By evaluating course content to confirm the location and quality of expression of teaching presence in instructional design, improvements can be made before course delivery. Instructional design plays an important role in teaching presence because it can also support instructor-student interactions during a course. Please note that while the focus of the *pre-course rubric* is on teaching presence, it is not meant to be the only evaluation tool used to confirm a course is ready for delivery.

The *pre-course rubric* lists the indicators of teaching presence that impact instructional design and includes suggestions for where and how they might be expressed in a course to guide the evaluation. There is also space to include comments to provide specific suggestions. For ease of reference, indicators are numbered and coded by category, as indicated below.

CD = *Course Design*

DI = *Direct Instruction*

FD = *Facilitating Discourse*

AS = *Assessment*

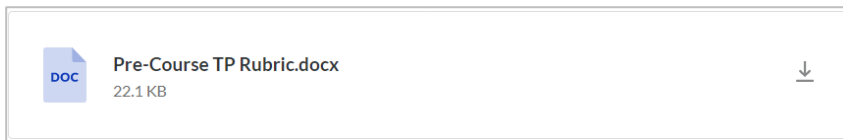
The *pre-course rubric* is only a starting point to begin thinking about how teaching presence is reflected in good instructional design. Program administrators may wish to customize the *pre-course rubric* to modify indicators to align with their program's instructional design approach, length of course, or learning management system limitations, or omit any that do not apply. For example, the indicator FD3 (*reinforcing the development of a sense of community among course participants*) can be incorporated into a course in multiple ways, such as an "Introduce Yourself" asynchronous discussion, or live introductions in a webinar format. As a result, the rubric can be updated to include either option, as appropriate. Also, if a course is of short duration, AS6 (*seeking feedback upon completion of modules or during mid-course*) may not apply because mid-course feedback on the content may not be necessary.

How you administer, review the results, and make improvements to instructional design based on the *pre-course rubric* depends on your instructional design team's roles and responsibilities. Sometimes instructors are also responsible for instructional design, while in other departments the design and instruction aspects of a course are separate and there may be multiple designers involved. Ultimately, the rubric should be administered by someone other than the primary instructional designer for an objective evaluation of the course. The evaluator or program administrator should review the *pre-course rubric* with the instructional designer and instructor and consult on ways to make improvements to the course. These individuals should also be provided with a copy of the rubric results and any written comments. The course, *Improving Teaching Presence in Online Courses*, contains specific suggestions for how teaching presence indicators can be expressed in instructional design to align design with best practices. After improvements are made, the program administrator or evaluator can review the course again using the rubric to confirm the improvements.

Another benefit of the *pre-course rubric* is to use it as a guide during initial course instructional design, and then use the rubric to also confirm the final design.

To download an MS Word version of the *pre-course rubric*, please see the link below. Scroll down to the end of this section to view an online version of the *pre-course rubric*.

[download link in e-learning version]



Pre-Course Rubric [see Appendix A in this section]

Post-Course Student Survey [Page]

The *post-course student survey* is designed to focus on measuring indicators of teaching presence where student feedback would be particularly helpful to guide improvements to practice. This includes evaluating instructor-student interactions during the course and the more subjective aspects of instructional design related to teaching presence, such as if instructions, topics, and goals were clear. The survey is administered electronically by the program administrator immediately after students complete a course (see below). Depending on the length of the continuing professional development course, you may also wish to consider a mid-course student survey. Survey tools such as Qualtrics or Survey Monkey provide useful data analysis and report tools. In the *post-course student survey*, students rate their agreement on the presence of teaching presence indicators based on a 5-point Likert agreement scale (below).

5-Point Likert Agreement Scale

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

To keep the survey brief, some indicators were combined into single survey statements (see survey below). Questions 1 through 6 relate to instructor-student interactions during a course, while questions 7 and 8 confirm instructional design choices. Students also have the opportunity to rate their overall satisfaction with the course and enter open-ended responses on how the course could be improved. Be sure to review the survey content to ensure indicators apply to your course and omit any that do not. For ease of reference, indicators are numbered and coded by category, as indicated below. The survey omits several indicators related to instructor-student interactions to reduce its length (DI3, DI5, FD4, FD6, FD8) that could be determined relatively objectively using a rubric.

CD = *Course Design*

DI = *Direct Instruction*

FD = *Facilitating Discourse*

AS = *Assessment*

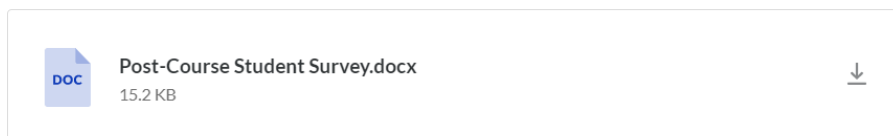
Compile the *post-course student survey* data in a spreadsheet and calculate the average student perception ratings for each survey item. Program administrators will need to determine the rating threshold below which improvements to practice are suggested. For example, a program could decide that any rating below Agree (4.0-5.0) should be considered an area in need of improvement. As improvements are made, the threshold rating can increase or be adjusted over multiple iterations of a course.

An *Instructor Scorecard* has been designed to compile the *post-course student survey* results for the instructor along with any student comments (see *Making Sense of the Data* section).

Instructors can refer to the course, *Improving Teaching Presence in Online Courses*, for specific suggestions and best practices for how teaching presence can be expressed in instructor-student interactions and instructional design.

To download an MS Word version of the *post-course student survey*, please see the link below.

[Link is active in e-learning version]



Post-Course Student Survey

Post-Course Student Survey	1 <i>Strongly Disagree</i>	2 <i>Disagree</i>	3 <i>Neutral</i>	4 <i>Agree</i>	5 <i>Strongly Agree</i>
1. The instructor helped focus the discussion on relevant issues and kept course participants on task, engaged, and participating in productive dialogue. [FD5, FD7]					
2. The instructor provided useful examples, insights, and analogies that advanced my understanding of course topics. [DI1, DI2]					
3. The instructor guided the class towards understanding course topics in the discussion in ways that helped me clarify my thinking. [FD2]					
4. The instructor provided clarifying information on course topics. [DI4]					
5. The instructor provided feedback on assignments in a timely manner that helped me understand my strengths and weaknesses. [AS2]					
6. The instructor identified areas of agreement and disagreement on course topics in the discussion in ways that helped me to learn. [FD1]					
7. The instructor provided the macro-level big picture on course content and clearly communicated important course topics and goals. [CD1, CD6]					
8. The instructor provided clear instructions on how to participate in course learning activities. [CD2]					
9. The instructor reinforced the development of a sense of community among course participants. [FD3]					
10. Overall, I was satisfied with my learning experience in this course.					
11. Do you have any suggestions for what would have made your learning experience better? [open-ended]					

Post-Course Rubric [Page]



This instructor didn't follow the course instructional design.

Because student feedback is not always a reliable indicator of instructor practice, the *post-course rubric* is designed to be administered by a program administrator after every course iteration to objectively confirm that instructor-student interactions expected to occur in a course actually did. Depending on the length of the continuing professional development course, you may also wish to consider completing the *post-course rubric* mid-course as well.

The *post-course rubric* includes indicators related to instructor-student interactions with suggestions for how they might be expressed in a course to guide the evaluation (see rubric below). The *post-course rubric* is organized by where such actions would be expected to take place, and there is also space to include comments for specific suggestions. Similar to the *pre-course rubric*, program administrators may wish to customize the *rubric* to align with their program's instructional design approach and any learning management system limitations. For ease of reference, indicators are numbered and coded by category, as indicated below.

CD = *Course Design*

DI = *Direct Instruction*

FD = *Facilitating Discourse*

AS = *Assessment*

Once the *post-course rubric* is completed, provide instructors with a copy of the completed rubric with written comments on indicators in need of improvement. The program administrator and instructor should review the rubric and *Instructor Scorecard* together and consult on ways to improve instructor practice (see Making Sense of the Data section). Instructors can refer to the course, *Improving Teaching Presence in Online Courses*, for specific suggestions for how teaching presence can be expressed in instructor practice. In the next iteration of the course, the program administrator can compare survey and rubric results to confirm the improvements.

To download an MS Word version of the *post-course rubric*, click on the link below. Scroll down to the to view an online version of the *post-course rubric*.

[Link is active in e-learning version; See Appendix B in this section for *post-course rubric*.]



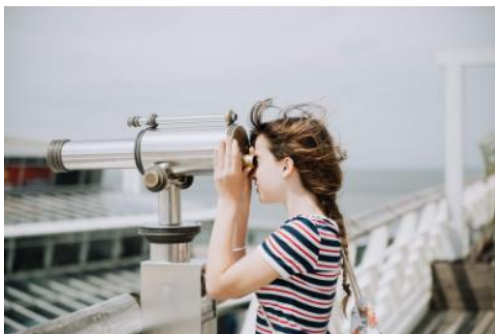
Post-Course TP Rubric.docx
23.3 KB



A Closer Look: Analyzing Course Content & Survey Data [Page]

This section includes highlights of recent research related to the suggestions outlined in this toolkit for evaluating instructional design and instructor-student interactions related to teaching presence.

Analyzing Course Content



In my study of teaching presence in continuing professional development courses, I conducted a content analysis of two courses which included all text-based content and instructor in discussion posts. The collected data was consolidated into a list of indicators and their objective location and frequency of occurrence in each course. The code counts provided a general sense of how often teaching presence occurred

in instructional design and the frequency of instructor-student interactions related to discussion, grades, and feedback. However, there are no established guidelines for how frequently such actions should take place, and the data did not provide any information on the quality of expression. To guide improvements to practice, further analysis was needed related to quality of expression and also to confirm the specific location of indicators in course instructional design. Another challenge is that such an approach may not be practical in professional development settings – the content analysis took over 40 hours of effort to complete for the two courses.

A modified form of content analysis via a rubric may be more beneficial to evaluate teaching presence, as it could direct evaluators to appropriate locations and suggested expressions of teaching presence in instructional design. For example, CD2 (*providing clear instructions on how to participate in course learning activities*) occurred 111 times in both courses. Instead of trying to determine if 111 times is sufficient, the program administrator can look at the instructions and determine that there are instructions for every learning activity and they are clearly written. This method works well for measuring the categories of *Course Design*, *Assessment*, and some indicators under *Direct Instruction*, as well as several *Facilitating Discourse* indicators that have a foundation in good instructional design. Most instructor-student interactions, however, such as all of the category of *Facilitating Discourse*, are subjective and should also be measured using a student survey tool.

In my content analysis, I also found that some indicators had zero counts, indicating a need to customize data collection tools to omit instructor actions that will not take place due to *Course Design* decisions. For example, AS5 (*soliciting formative assessment on course design and learning activities from students and other participants*) had a zero count. When I took a closer

look, I realized the course instructional design purposefully excluded a formative student mid-course assessment because of the courses' short, four-week duration. The instructional designers felt an end-of-course assessment was sufficient for student feedback.

Analyzing Survey Data

The *post-course student survey* data collected during my study of teaching presence in five continuing professional development courses was simple to analyze and interpret. The online survey was sent out immediately after course completion, and average perception ratings were calculated in Excel. The *post-course student survey* collected data that was particularly useful in evaluating indicators related to instructor-student interactions, such as those in the categories of *Facilitating Discourse* and *Direct Instruction*, as well as other indicators related to instructional design that were more subjective in nature, such as the clarity of instructions (CD2).

Average student indicator ratings of Agree (4.0) or less were flagged for improvement related to instructor practice and instructional design. As an example, across all courses, the average student rating for AS2 on the quality of instructor feedback was found to be above 4.0, so no further action was needed. However, for FD7 (*keeping students on task in the discussion*), average ratings were below 4.0, indicating a need for continuing professional development in that area. Program administrators will need to make their own determinations related to ratings thresholds based on their needs.

Making Sense of the Data [Section]

The Instructor Scorecard [Page]

The *Instructor Scorecard* organizes *post-course student survey* results for instructors using an easy to interpret presence score, which provides a meaningful frame of reference for instructors based on a scale of 0 – 100%. The *Scorecard* should be reviewed together with the *post-course rubric*, so indicators that appear in both measurement tools can be evaluated together using multiple sources of data. To determine the presence score from the *post-course student survey* data, you will need to average the student rating for each survey item, then divide by the highest possible rating of 5 and multiply this number by 100%.

$$\text{Presence Score: (Average Student Rating/Perfect Rating) x 100\%}$$

For example, if for question 1 of the survey the average student rating was 3.65, the presence score would be calculated as $(3.65/5) \times 100\% = 73\%$.

The scale for the Presence Scores is follows:

Strongly Disagree = 0-39%; Disagree = 40-59%; Neutral = 60-79%; Agree = 80-100%

The *Instructor Scorecard* presents the survey data and includes columns for each question's presence score and goal score, which can be determined jointly with the instructor and progress tracked after each iteration. The *Scorecard* also indicates which survey items are measured in the *post-course rubric* as well for ease of reference. The presence goals included in the *Instructor Scorecard* below are arbitrary but are included to suggest how the *Scorecard* might be used.

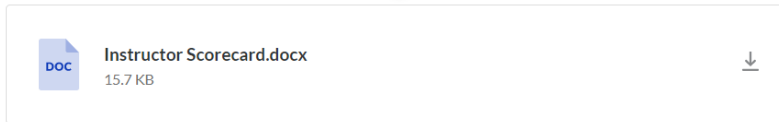
Discussions with instructors should center around using the data to guide improvements to practice and instructional design, when appropriate. The open-ended question results should also be reviewed carefully to provide any additional details on suggested improvements that the survey questions do not capture. It may also be beneficial to include the instructional designer in the consultation for a comprehensive consideration of improvements. Multiple indicators included in the *post-course student survey* related to subjective aspects of instructional design can be tweaked between course iterations.

For example, if the *Instructor Scorecard* indicated that Post-Course Student question #7 (*providing macro-level big picture on course content and clearly communicated important course topics and goals*; CD1, CD6) were in need of improvement (below 80%), it would be beneficial to review not only the instructor practice around these actions but also the instructional design. The open-ended question may also provide additional insights from students. The program administrator, instructional designer, and instructor can consult together

on how to adjust the design to better represent CD1 and CD6 in the content, including module introductions and lectures, and also consider how the instructor can provide reinforcement during discussions and in student feedback. As a starting point, the group should consider the guidelines in the course, *Improving Teaching Presence in Online Courses*, and then consult further on how they might apply in the context of their specific course.

Click on the link below to download an MS Word version of the *Instructor Scorecard*. Scroll down to view an online version of the Scorecard.

[Link is active in e-learning version]



Instructor Scorecard

Instructor Scorecard		
<p>Instructions: Compare <i>Post-Course Student Survey</i> presence scores for each survey question against your goals to identify areas in need of improvement. All indicators in the survey are also evaluated in the <i>Post-Course Rubric</i>, so review both data together for a more complete picture of teaching presence to guide improvements to practice.</p> <p>Scale: Strongly Disagree = 0-39%; Disagree = 40-59%; Neutral = 60-79%; Agree = 80-100%</p>	Presence Score (% of 5.0)	Presence Goal
1. The instructor helped focus the discussion on relevant issues and kept course participants on task, engaged, and participating in productive dialogue. [FD5, FD7]	73%	95%
2. The instructor provided useful examples, insights, and analogies that advanced my understanding of course topics. [DI1, DI2]	78%	95%
3. The instructor guided the class towards understanding course topics in the discussion in ways that helped me clarify my thinking. [FD2]	72%	90%
4. The instructor provided clarifying information on course topics. [DI4]	78%	90%
5. The instructor provided feedback on assignments in a timely manner that helped me understand my strengths and weaknesses. [AS2]	78%	90%
6. The instructor identified areas of agreement and disagreement on course topics in the discussion in ways that helped me to learn. [FD1]	66%	90%
7. The instructor provided the macro-level big picture on course content and clearly communicated important course topics and goals. [CD1, CD6]	80%	95%
8. The instructor provided clear instructions on how to participate in course learning activities. [CD2]	64%	90%
9. The instructor reinforced the development of a sense of community among course participants. [FD3]	58%	90%
10. Overall, I was satisfied with my learning experience in this course.	72%	90%
11. Do you have any suggestions for what would have made your learning experience better? [open-ended]		

Resources & References [Page]

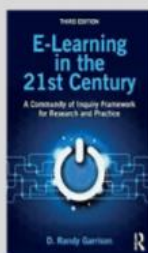
Below are additional resources and the references cited in the toolkit.



Improving Teaching Presence in Online Courses was developed to assist instructors understand and better apply teaching presence best practices in online continuing professional development courses.

Additional Resources

Join the Community of Inquiry site (<https://coi.athabascau.ca/>), run by Dr. Randy Garrison, for more information on the COI model, COI research papers, blogs, book recommendations, presentations and useful links, free webinars, and peer discussion forums.

**E-Learning in the 21st Century (3rd edition)**

This book provides an overview of understanding e-learning in higher education based on the Community of Inquiry model. Available from Amazon.com.

Appendix A

Pre-Course Teaching Presence Rubric

For ease of use, a guided *pre-course rubric* is organized by where a program administrator would look in the course for specific instances of teaching presence.

Syllabus/Welcome Info

CD1: The instructor clearly communicates important course topics and goals.

- ☐ Include main topics and module/lesson goals in syllabus.

Comments:

CD4: The instructor helps with technical issues related to participation in the course.

- ☐ Include information on where to get technical assistance and guidelines for support.

Comments:

CD5: The instructor provides guidance on good netiquette and acceptable online learning behavior, and addresses any issues related to netiquette in a timely manner.

- ☐ Include a netiquette statement in the course syllabus, and more specific guidelines in a rubric for discussions.

Comments:

Instructional Design of Discussion Forums

AS1: The instructor provides ongoing (formative) feedback on student participation in discussion forums during the course.

- ☐ Build formative feedback on student discussion forum participation into *Course Design* by including a grade for each individual discussion.

Comments:

AS4: The instructor provides overall feedback (summative) on my participation in discussion forums at the end of the course.

- ☐ Incorporate an overall discussion grade with the opportunity to provide comments into the course.

Comments:

FD3: The instructor's actions reinforce the development of a sense of community among course participants.

- ☐ Include an "Introduce Yourself" discussion to help develop a sense of community in the course.

Comments:

CD2: The instructor provides clear instructions on how to participate in course learning activities.

- ☐ Provide discussion instructions, including purpose, expectations, instructions, grade/point value, how to submit, and time frames.
- ☐ Include a rubric for discussion participation.

Comments:

CD3: The instructor clearly communicates important due dates/time frames for learning activities.

- ☐ List clear due dates and times for discussion participation, such as when to submit the initial post and when replies to peers are due.

Comments:

CD5: The instructor provides guidance on good netiquette and acceptable online learning behavior, and addresses any issues related to netiquette in a timely manner.

- ☐ Include a netiquette information in the discussion rubric.
- ☐ Include a discussion forum within the first two weeks of the course focused on helping students understand netiquette expectations.

Comments:

CD6: The instructor provides the macro-level big picture on course content.

- ☐ Incorporate the rationale behind a discussion/assignment in terms of course goals/objectives into the instructions.

Comments:

DI4: The instructor provides clarifying information.

- ☐ Use discussion forum prompts as opportunities to confirm understanding and determine if there are misconceptions so that clarification can be provided.

Comments:

FD2: The instructor guides the class towards understanding course topics in a way that helped me clarify my thinking.

- ☐ Ensure discussion prompts promote inquiry and not summarization.

Comments:

FD4: The instructor encourages course participants to explore new concepts AND FD6: The instructor presents follow-up topics for discussion.

- ☐ Determine follow-up topics and new concepts for discussions as part of the instructional design of the course.

Comments:

Instructional Design of Course Introduction

CD4: The instructor helps with technical issues related to participation in the course.

- ☐ Include information on where to get technical assistance and guidelines for support.
- ☐ Include a video tutorial on navigating the course, submitting assignments, and participating in discussions, as appropriate.

Comments:

CD5: The instructor provides guidance on good netiquette and acceptable online learning behavior, and addresses any issues related to netiquette in a timely manner.

- ☐ Consider including an overview of netiquette expectations in a course overview lecture or comments.

Comments:

CD6: The instructor provides the macro-level big picture on course content.

- ☐ Describe the macro-level big picture of the course in the course introduction.
- ☐ Incorporate the rationale behind an assignment in terms of course goals/objectives into the instructions.
- ☐ Describe assignment requirements in course lectures and include the rationale by making connections with course goals/objectives.

Comments:

FD3: The instructor's actions reinforce the development of a sense of community among course participants.

- ☐ Introduce yourself to students in the course introduction to build a sense of connection, include a picture.
- ☐ Encourage students to update their online LMS profiles and include a picture.

Comments:

Instructional Design of Assessments

AS2: The instructor provides feedback on assignments that helps students understand their strengths and weaknesses.

- ☐ Build feedback on assignments into *Course Design* by including a grade for each assignment with the opportunity to include written feedback.
- ☐ Consider including a rubric for each assignment to enhance student understanding and streamline instructor feedback. If available, incorporate the rubric into the assessment grade and provide feedback in the rubric with written comments.

Comments:

AS3: The instructor provides feedback on assignments in a timely manner.

- ☐ Consider putting specific dates or timeframes in the assignment instructions for when students can expect feedback to be returned.

Comments:

CD2: The instructor provides clear instructions on how to participate in course learning activities.

- ☐ Provide step-by-step guidelines for assignments, including purpose, expectations, instructions, grade/point value, and how to submit.

- ☐ Include a rubric and examples for each assignment to enhance student understanding of assignment requirements and streamline instructor feedback. If available, incorporate the rubric into the assessment grade in the LMS and feedback can be provided directly in the rubric with written feedback in notes.

Comments:

CD3: The instructor clearly communicates important due dates/time frames for learning activities.

- ☐ List clear due dates and times for all assignments.

Comments:

CD6: The instructor provides the macro-level big picture on course content.

- ☐ Describe how assignments support course goals/objectives.

Comments:

Instructional Design of Lecture/Module Content

CD1: The instructor clearly communicates important course topics and goals.

- ☐ Provide topics and goals in the introduction or learning pathway for each course module/lesson.

Comments:

CD6: The instructor provides the macro-level big picture on course content.

- ☐ Identify how lecture/module content aligns with course goals/objectives.

Comments:

DI1: The instructor provides valuable analogies.

- ☐ Use analogies in lectures and other content to support learning.

Comments:

DI2: The instructor provides useful examples and insights that advanced my understanding of the topic.

- ☐ Use examples in lectures and other content to support learning.

Comments:

DI3: The instructor provides supportive demonstrations, like links to online simulations or websites.

- ☐ Incorporate demonstrations and website links into lectures and other learning content to increase comprehension.

Comments:

DI4: The instructor provides clarifying information.

- ☐ Use previous suggestions for incorporating analogies, examples, demonstrations, etc., into the instructional design of the learning content to clarify content.

Comments:

DI5: The instructor references outside materials and sources.

- ☐ Incorporate outside materials and sources in the instructional design of the course to support the learning content.

Comments:

Evaluation of Course/Instructor Practice

AS6: The instructor solicits formative assessment on *Course Design* and learning activities from students and other participants.

- ☐ Incorporate a formative assessment on *Course Design* and learning activities, which can consist of the *post-course student survey* and/or the *post-course rubric*. (If your continuing professional development course is of short duration, your instructional design may not include formative assessment of *Course Design* and learning activities.)

Comments:

Final Grades

AS5: The instructor provides overall feedback (summative) on student performance in the course as a whole.

- ☐ Incorporate a final grade into the instructional design of the course and include an option for summative feedback.

Comments:

Appendix B

Post-Course Teaching Presence Rubric

For ease of use, the *post-course rubric* is organized by where a program administrator would look in the course for specific instances of teaching presence.

Overall Instructor Behavior in Discussion

CD5: The instructor provided guidance on good netiquette and acceptable online learning behavior, and addresses any issues related to netiquette in a timely manner.

- ☐ Did the instructor actively participate in the discussion forum focused on netiquette and clarify expectations?
- ☐ Did the instructor model appropriate discussion participation?
- ☐ Did the instructor respond to the group with any issues related to netiquette, if appropriate?

Comments:

CD1: The instructor clearly communicated important course topics and goals.

- ☐ Did the instructor review or refer to course topics and goals in the discussions, if appropriate?

Comments:

FD3: The instructor's actions reinforced the development of a sense of community among course participants.

- ☐ Did the instructor actively participate in the "Introduce Yourself" discussion and welcome students?
- ☐ Did the instructor use student names when responding in the discussion?

Comments:

Instructor Facilitation and Guiding Inquiry

FD1: The instructor identified areas of agreement and disagreement on course topics that help students to learn; FD2: The instructor guided the class towards understanding course topics in a way that helped me clarify my thinking; FD4: The instructor encouraged course participants to explore new concepts; FD6: The instructor presented follow-up topics for discussion; FD8: The instructor summarized discussion contributions and highlighted key concepts and relationships.

- ☐ Did the instructor actively participate in discussions and guide inquiry appropriately based on best practices?
- ☐ Did the instructor share discussion summaries/highlights to students when the discussion closes?

Comments:

FD5: The instructor kept course participants engaged and participating in productive dialogue; FD7: The instructor kept course participants on task and focused discussions on relevant issues in ways that helped me to learn.

- ☐ Did the instructor actively participate in discussions guide engagement appropriately based on best practices?

Comments:

AS1: The instructor provided ongoing (formative) feedback on student participation in discussion forums during the course.

- ☐ Did the instructor respond provide feedback on participation in responses to students?

Comments:

DI1: The instructor provided valuable analogies.

- ☐ Did the instructor use analogies in the discussion to help students understand new content?

Comments:

DI2: The instructor provided useful examples and insights that advanced my understanding of the topic.

- ☐ Did the instructor use examples in the discussion to help students understand new content?

Comments:

DI3: The instructor provided supportive demonstrations, like links to online simulations or websites.

- ☐ Did the instructor refer students to links and demonstrations in the course, or provide new learning content as needed in the discussion?

Comments:

DI4: The instructor provided clarifying information.

- ☐ Did the instructor actively participate in discussions and provide clarifying information as needed?

Comments:

DI5: The instructor referenced outside materials and sources.

- ☐ Did the instructor suggest outside materials and sources when appropriate to provide clarifying information?

Comments:

After a Discussion

AS1: The instructor provided ongoing (formative) feedback on student participation in discussion forums during the course.

- ☐ Did the instructor provide a grade for a discussion with specific feedback on the student's participation?

Comments:

AS4: The instructor provided overall feedback (summative) on my participation in discussion forums at the end of the course.

- ☐ Did the instructor assign a final discussion grade and provide feedback on discussion participation by evaluating the student's achievements in the course?

Comments:

Assignment Reminders/Emails

CD2: The instructor provided clear instructions on how to participate in course learning activities.

- ☐ Did the instructor ask students if they have any questions about upcoming assignments and/or respond to requests for additional information in a timely manner?
- ☐ Did the instructor remind students to refer to the rubric before submitting assignments?

Comments:

CD3: The instructor clearly communicated important due dates/time frames for learning activities.

- ☐ Did the instructor communicates important due dates/time frames to help students keep pace with the course, e.g. accurate course schedule?
- ☐ Did the instructor remind students of due dates in weekly email or before assignment is due?
- ☐ Did the instructor follow-up if students do not turn in assignments on time?

Comments:

CD4: The instructor helped with technical issues related to participation in the course.

- ☐ Did the instructor advise students via email at the start of the course of what the technical support protocol?
- ☐ Did the instructor send out technical guidelines for logging in and navigation prior to the start of the course, and include additional instructions for common technical issues?
- ☐ Did the instructor reach out to students who do not appear in the course the first day to check for technical issues?

Comments:

CD5: The instructor provided guidance on good netiquette and acceptable online learning behavior, and addresses any issues related to netiquette in a timely manner.

- ☐ Did the instructor respond to any issues related to netiquette in a private communication?

Comments:

CD6: The instructor provided the macro-level big picture on course content.

- ☐ Did the instructor refer to the rationale for the assignment related to course goals/objectives when reminding students about an assignment?

Comments:

After an Assignment is Submitted

AS2: The instructor provided feedback on assignments that helps students understand their strengths and weaknesses.

- ☐ Did the instructor assign a grade and provide personalized feedback to students on their strengths and weaknesses related to the assignment?
- ☐ Did the instructor, if available, use a rubric and personalized comments?

Comments:

AS3: The instructor provided feedback on assignments in a timely manner.

- ☐ Did the instructor practice good time management to provide feedback in a timely manner?

Comments:

Mid- and/or Post-Course

AS6: The instructor solicited formative assessment on *Course Design* and learning activities from students and other participants.

- ☐ Did the instructor implement the assessment/survey at the appropriate time during the course and review responses (and provide to program administrator to review) and make improvements to the *Course Design* and learning assessments as appropriate?

Comments:

Final Grade/End of Course

AS5: The instructor provided overall feedback (summative) on student performance in the course as a whole.

- ☐ Did the instructor assign a final grade and provide summative, personalized feedback evaluating the student's achievements in the course?

Comments:

Chapter 4: Improving Teaching Presence in Online Courses

This is a Word version of the Improving Teaching Presence Course for review purposes. Effort was made to insert graphics to make this version look as similar as possible to the e-learning version, with notations related to any interactivity not possible to capture in Word. Sections and pages are noted in [brackets].

Home [Page]



An in-depth course on how instructors and instructional designers can improve practice related to instructor-student interactions and the design of online professional development courses based on the Community of Inquiry model's construct of teaching presence. Click the *Start Here* button to begin.

Introduction [Section]

Overview [Page]

Welcome! The purpose of *Improving Teaching Presence in Online Courses* is to assist instructors and instructional designers to improve practice and design in online continuing professional development courses.

This course has three objectives:

- To define the Community of Inquiry's construct of teaching presence related to online instructor-student interactions and course instructional design.
- To consider teaching presence best practices as a starting point for making improvements to practice and design.
- To examine how teaching presence can be measured and evaluated to guide iterative improvements.



This course is designed as both a tutorial and a resource. Start by learning about the Community of Inquiry model and teaching presence, then review the specific suggestions and best practices for implementing teaching presence in instructor practice and instructional design. In the last section, we consider how to measure and evaluate teaching presence in online courses to create a cycle of continuous improvement.

About the Author



Jen Chingwe is a doctoral student at the Rutgers University Graduate School of Education. Her professional experience in talent development and instructional design ranges from corporate training, to higher and K-12 education, to government adult education programs, with an emphasis on e-learning and designing online learning environments. Jen currently works as an instructional designer and project manager for a talent management consulting company. She also teaches an online undergraduate course, Education & Computers, at Rutgers University.

The suggestions in this Course were developed based on the results of Jen's dissertation research – a mixed methods multiple case dissertation study that measured and evaluated instructor practice in five online continuing professional development courses. As part of this study, consideration was given to how existing COI data collection and evaluation methods and tools might be adapted for use in continuing professional development settings. The course also reflects her professional experience and doctoral studies in the Design of Learning Contexts.

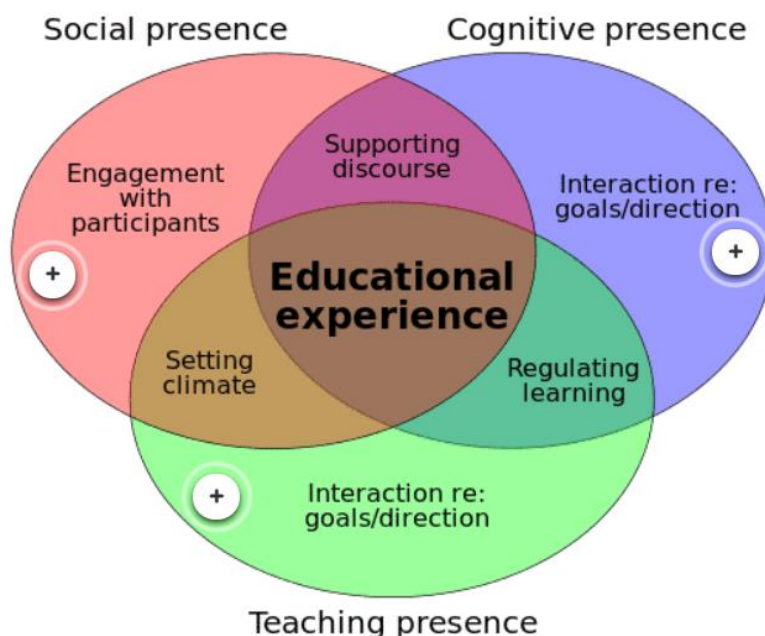
The methods and approaches outlined in this toolkit add to a community of practice using these tools in various educational settings. You are invited to try these methods and contact the author with feedback, suggestions, or questions. Please email Jen Chingwe at jchingwe@rutgers.edu.

What is a Community of Inquiry? [Page]

Over the last twenty years, there have been some exciting developments related to measuring, evaluating, and improving instructor practice in higher education online courses using the Community of Inquiry (COI) model and its construct of teaching presence that may be new to continuing professional development providers. A COI is a model of online learning that defines, describes, and measures the elements that support a worthwhile learning experience. The COI framework represents a process of creating a deep and meaningful collaborative, constructivist learning experiences through the development of three interdependent elements: social, cognitive, and teaching presence (coi.athabasca.ca). The strong relationship between instructor practice in a COI and student satisfaction, the operationalization of teaching presence into distinct instructor actions that can be measured, and the use of validated COI measurement tools to guide evaluation, provide a firm foundation for continuing professional development programs to improve practice and instructional design by applying research-based methods and approaches.


Click on the markers below to learn more about each presence in the COI framework. Click on videos to enlarge.

[Interactive graphic, next page; links only work in e-learning version]



Social Presence < >


Alexandra Pickett Reflect... ⌚ ↗



Social presence is "the ability of participants to identify with the community (e.g., course of study), communicate purposefully in a trusting environment, and develop inter-personal relationships by way of projecting their individual personalities." (Garrison, 2009) (coi.athabasca.ca)

Teaching Presence < >


Teaching Presence in Onli... ⌚ ↗



Teaching Presence is the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes (Anderson, Rourke, Garrison, & Archer, 2001). (Coi.athabasca.ca)

Cognitive Presence < >

Col The Cognitive Presence... ⌚ ↗



Cognitive Presence is the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse (Garrison, Anderson, & Archer, 2001). (coi.athabasca.ca)

Video embed code:

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frameborder="0" allow="autoplay; encrypted-media" allowfullscreen></iframe>
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What is Teaching Presence? [Page]



"Teaching presence is defined as the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educational worthwhile learning outcomes."

- Anderson, T., Rourke, L., Garrison, D. R., Archer, W. (2001). Assessing Teaching presence in a Computer Conference Environment. *Journal of asynchronous learning networks*, 5(2), 1-17.

The Community of Inquiry model's construct of teaching presence offers a useful framework for providing insights into the practice-based requirements of effective online instruction. The construct broadly describes the essential instructor actions that foster student inquiry. Teaching presence is arguably the most essential element in a COI and is also a significant predictor of student satisfaction and perceived learning. Instructors focused on improving teaching presence need to attend to both instructional design and instructor-student interactions in their online courses, as effective instructional design can significantly support the expression of productive instructor-student interactions in discussions and feedback.

There are 25 operationalized instructor actions that comprise teaching presence, known as indicators, that are organized into four main categories: *Course Design*, *Direct Instruction*, *Facilitating Discourse*, and *Assessment*. Instructors and designers can use these indicators as broad guidelines to guide instructor practice and the design of online courses. Familiarize yourself with each category by clicking on the tabs below. Indicators are identified by category and numbered for ease of reference (CD=*Course Design*, DI=*Direct Instruction*, FD=*Facilitating Discourse*, AS=*Assessment*). In the next section, we'll take a practical look at best practices for the expression of each indicator in practice and instructional design.

COURSE DESIGN	DIRECT INSTRUCTION	FACILITATING DISCOURSE	ASSESSMENT
<p><i>Course Design</i> includes elements of instructional design that support teaching presence.</p> <p><i>"Building the course in a digital format forces teachers to think through the process, structure, evaluation and interaction components of the course....the teacher is forced to be more explicit and transparent in their planning process. (Anderson, Rourke, Garrison, & Archer, 2001)</i></p> <p>Below is a list of the six indicators of teaching presence that fall under <i>Course Design</i>.</p> <ul style="list-style-type: none"> • CD1: The instructor clearly communicates important course topics and goals. • CD2: The instructor provides clear instructions on how to participate in course learning activities. • CD3: The instructor clearly communicates important due dates/time frames for learning activities. • CD4: The instructor helps with technical issues related to participation in the course. • CD5: The instructor provides guidance on good netiquette and acceptable online learning behavior, and addressed any issues related to netiquette in a timely manner. • CD6: The instructor provides the macro-level big picture on course content. 			

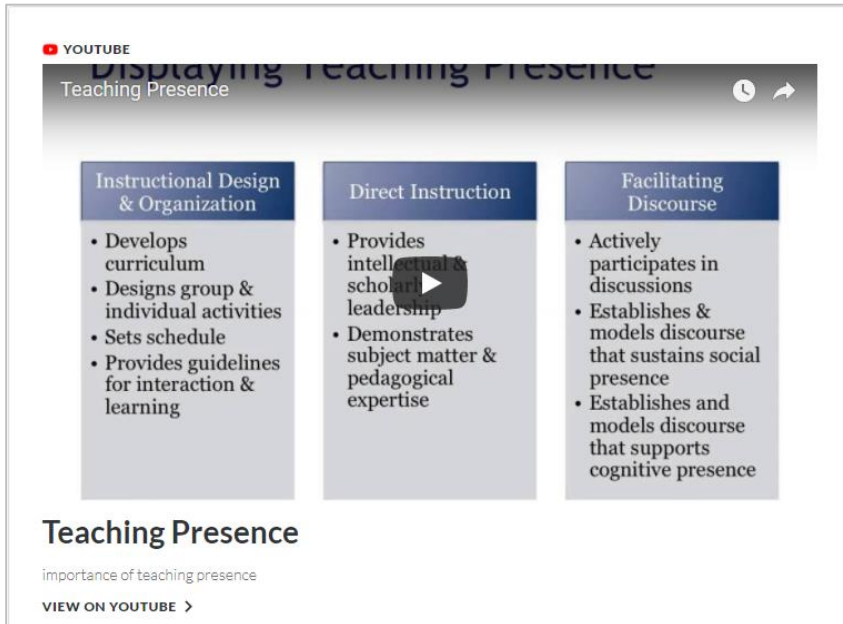
COURSE DESIGN	DIRECT INSTRUCTION	FACILITATING DISCOURSE	ASSESSMENT
<p><i>Direct Instruction</i> involves instructors sharing their subject matter expertise and is expressed in both instructional design and instructor-student interactions.</p> <p><i>"Teachers provide intellectual and scholarly leadership and share their subject matter knowledge with students. The students and the teacher have expectations of the teacher communicating content knowledge....The role of the teacher, in any context, involves direct instruction that makes use of the subject matter and pedagogical expertise of the teacher." (Anderson, Rourke, Garrison, & Archer, 2001)</i></p> <p>Below is a list of the five indicators of teaching presence that fall under <i>Direct Instruction</i>.</p> <ul style="list-style-type: none"> • DI1: The instructor provides valuable analogies during the discussion. • DI2: The instructor provides useful examples and insights that advanced my understanding of the topic. • DI3: The instructor provides supportive demonstrations, like links to online simulations or websites. • DI4: The instructor provides clarifying information. • DI5: The instructor references outside materials and sources. 			

COURSE DESIGN	DIRECT INSTRUCTION	FACILITATING DISCOURSE	ASSESSMENT
<p><i>Facilitating Discourse</i> guides productive student inquiry in the discussion and is expressed in instructor-student interactions.</p> <p><i>"Facilitating discourse during the course is critical to maintaining the interest, motivation and engagement of students in active learning. We use the term discourse rather than discussion to highlight the focused and sustained deliberation that marks learning in a community of inquiry..." (Anderson, Rourke, Garrison, & Archer, 2001)</i></p> <p>Below is a list of the eight indicators of teaching presence that fall under <i>Facilitating Discourse</i>.</p> <ul style="list-style-type: none"> • FD1: The instructor identifies areas of agreement and disagreement on course topics that helped me to learn. • FD2: The instructor guides the class towards understanding course topics in a way that helped me clarify my thinking. • FD3: The instructor's actions reinforce the development of a sense of community among course participants. • FD4: The instructor encourages course participants to explore new concepts. • FD5: The instructor keeps course participants engaged and participating in productive dialogue. • FD6: The instructor presents follow-up topics for discussion. • FD7: The instructor keeps course participants on task and focused discussions on relevant issues in ways that helped me to learn. • FD8: The instructor summarizes discussion contributions and highlighted key concepts and relationships. 			

COURSE DESIGN	DIRECT INSTRUCTION	FACILITATING DISCOURSE	ASSESSMENT
<p><i>Assessment</i> guides instructional design and practice related to assignment and discussion forum feedback and is expressed in instructor-student interactions.</p> <p><i>Assessment "include[s] both formative and summative assessment across a broad range of instructor and student activities that occur within an online course.... Two areas were closely identified with individual student assessment...participation in discussions and the completion of individual assignments." (Shea, Vickers, & Hayes, 2010)</i></p> <p>Below is a list of the six indicators of teaching presence that fall under <i>Assessment</i>.</p> <ul style="list-style-type: none"> • AS1: The instructor provided ongoing (formative) feedback on my participation in discussion forums during the course. • AS2: The instructor provided feedback on assignments that helped me understand my strengths and weaknesses. • AS3: The instructor provided feedback on assignments in a timely manner. • AS4: The instructor provided overall feedback (summative) on my participation in discussion forums at the end of the course • AS5: The instructor provided overall feedback (summative) on my performance in the course as a whole. • AS6: The instructor solicited formative assessment on course design and learning activities from students and other participants. 			

The video below provides a useful overview of the categories of *Course Design* (shown as Instructional Design & Organization), *Direct Instruction*, and *Facilitating Discourse*. *Assessment* is a relatively new category and is not included in the video.

[Link works in e-learning version]



<https://www.youtube.com/watch?v=X7MqCc-Qvjw>

For a more in-depth look at the research behind operationalizing and measuring teaching presence, read Anderson, Rourke, Garrison, & Archer's (2001) study (PDF).

Getting Started [Section]

How to Improve Instructor-Student Interactions and Instructional Design [Page]

The guidelines in this section provide a useful starting point for incorporating teaching presence into practice related to instructor-student interactions and instructional design. If you're currently teaching a course, you may want to initially focus on *Facilitating Discourse* and *Direct Instruction* to make immediate improvements to instructor-student interactions. If you're in the process of designing a course, the guidelines for instructional design in each category will be particularly helpful, and in the section on measuring teaching presence there is a guided *pre-course rubric* for evaluating design which can be used as a helpful checklist.

For each indicator of teaching presence, the following information is provided:

- A reminder of the definition and descriptive information from the research literature, if available.
- Best practices and examples of expressing the indicator of teaching presence in instructor student-interactions and instructional design. Best practices were taken from both higher education and professional development sources.
- Additional resources and links.

To support your efforts at improving practice and design, consider forming a peer-based learning group to collaborate and share best practices. Once initial improvements have been made, create a cycle of continuous improvement by measuring and evaluating teaching presence in your course after each iteration -- see the section on *Creating a Cycle of Continuous Improvement* for more details.

Other Resources for Best Practices

The links below provide more in-depth information on teaching presence.

- [Best Practices in Online Teaching Strategies](#), Hanover Research Council (from perspective of a COI, 2009)
- [Teaching Presence](#), Pearson (2016).
- [Teaching Presence Facilitates Meaningful Online Learning](#), Lowenthal & Parscal (2008)
- [Courses on Designing and Course and Teaching a Course](#) (from the COI perspective), UC Berkeley (free).

Course Design [Page]

Course Design primarily refers to elements of good instructional design and design that supports effective instructor-student interactions during a course. Click on the plus signs to open/close the breakout information below on each indicator of teaching presence in this

CD1: Communicating course topics and goals	+
CD2: Clear instructions for activities	+
CD3: Clear due dates/time frames for learning activities	+
CD4: Helping with technical issues	+
CD5: Netiquette guidance and addressing issues	+
CD6: Macro-level big picture on course content	+

category.

[Breakouts for each indicator are next]

CD1: Communicating course topics and goals**From the Research Literature**

CD1: The instructor clearly communicates important course topics and goals.

- Communicates important course outcomes, e.g. documentation of course goals, topics, rubrics and instructor expectations.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- Provide topics and goals in the introduction or learning pathway for each course module/lesson.
- Include main topics and module/lesson goals in syllabus.

Instructor-Student Interactions

- Review or refer to course topics and goals in lectures and other student interactions, including discussions.
 "This week's learning objectives are...."
 "This week we will be discussing..."
 "The discussion this week will help us better understand..."
- Link learning goals to course assignments.
 "After you complete this assignment, you will have a better understanding of..."

Resources

"Clearly defined learning goals/outcomes contribute to a structure that surrounds a course and can aid in selecting appropriate graded and ungraded assessments, selecting relevant content for the course, and enhancing the assessment or grading practices."

Learn more about [How can learning goals add value to teaching and learning?](https://teaching.berkeley.edu/resources/design/course-level-learning-goalsoutcomes) from UC Berkeley Center for Teaching and Learning.

<https://teaching.berkeley.edu/resources/design/course-level-learning-goalsoutcomes>

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

CD2: Clear instructions for activities**From the Research Literature**

CD2: The instructor provides clear instructions on how to participate in course learning activities.

- A clear explanation of how to complete course assignments successfully.

Expressions of Teaching Presence

If your continuing professional development course includes learning activities/assignments, consider improvements in the following areas.

Instructional Design

- Provide step-by-step guidelines for assignments, including purpose, expectations, instructions, grade/point value, and how to submit.
- Include a rubric and examples for each assignment to enhance student understanding of assignment requirements and streamline instructor feedback.
- Provide discussion instructions, including purpose, expectations, instructions, grade/point value, and how to participate.
- Include a rubric for discussion participation. (Example)
https://topr.online.ucf.edu/wp-content/uploads/2017/07/IDL6543_Discussion_Rubric.pdf

Instructor-Student Interactions

- Ask students if they have any questions about upcoming assignments; respond to requests for additional information in a timely manner.
"Does anyone have any questions about the assignment due on Tuesday?"
- Review assignment instructions and expectations in lectures and remind students to refer to the rubric before submitting.
"Before you submit your assignment, remember to refer to the rubric..."

Resources

Learn more about creating clear assignment instructions here.

<http://www.uncf.edu/learning-center/wac/faculty-home/formal-writing-project/engaging-and-clear>

Learn more about using rubrics with assignments here.

<https://www.cmu.edu/teaching/assessment/assesslearning/rubrics.html>

Writing Discussion Rubrics <https://topr.online.ucf.edu/discussion-rubrics/>

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

CD3: Clear due dates/time frames for learning activities

From the Research Literature

CD3: The instructor clearly communicates important due dates/time frames for learning activities.

- Communicates important due dates/time frames to help students keep pace with the course, e.g. accurate course schedules.

Expressions of Teaching Presence

If your continuing professional development course includes learning activities/assignments, consider improvements in the following areas.

Instructional Design

- List clear due dates and times for discussion participation, such as when to submit the initial post and when replies to peers are due.
- Include a rubric for discussion participation.

Instructor-Student Interactions

- Remind students of due dates in weekly email or before assignment is due.
"Remember, before you submit the assignment on 4/21, review the rubric to ensure all requirements have been met..."
"Please post your initial response by 4/21, and respond to two peers by 4/25..."
- Follow-up if students do not turn in assignments on time.
"I noticed you didn't turn in the assignment by the due date, I wanted to check in to see if you were having any technical issues..."

Resources

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

CD4: Helping with technical issues**From the Research Literature**

CD4: The instructor helps with technical issues related to participation in the course.

- Respond to technical concerns related to using the LMS correctly, or other online learning space.

Expressions of Teaching Presence

If instructors are responsible for technical assistance in your continuing professional development course, consider improvements in the following areas.

Instructional Design

- Include information on where to get technical assistance and guidelines for support.
- Include a video tutorial on navigating the course, submitting assignments, and participating in discussions, as appropriate.

Instructor-Student Interactions

- Advise students via email at the start of the course of the technical support protocol. Send out technical guidelines for logging in and navigation prior to the start of the course and include additional instructions for common technical issues.
"To access the course, go to"
"If you have any issues logging in or accessing course content, please contact..."
- Reach out to students who do not appear in the course the first day to check for technical issues.
"I noticed you haven't logged into the course yet and I wanted to check if you're having any technical issues..."

Resources

For more information, review *"A Balancing Act Part 1: Technical Support and the Online Instruct"* by eLearn Magazine.

<http://elearnmag.acm.org/archive.cfm?aid=2627756>

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

CD5: Netiquette guidance and addressing issues**From the Research Literature**

CD5: The instructor provides guidance on good netiquette and acceptable online learning behavior, and addresses any issues related to netiquette in a timely manner.

- Helps students understand and practice the kinds of behaviors that are acceptable in online learning, e.g., providing documentation on polite forms of online interaction.

Expressions of Teaching Presence

If your continuing professional development course includes asynchronous discussions, consider improvements in the following areas.

Instructional Design

- Include a netiquette statement in the course syllabus, and more specific guidelines in a rubric for discussions.
- Include a discussion forum within the first two weeks of the course focused on helping students understand netiquette expectations.
- Consider including an overview of netiquette expectations in a course overview lecture or comments.

Instructor-Student Interactions

- Actively participate in the discussion forum focused on netiquette and clarify expectations.
"Remember to focus on responding to the discussion prompt in your initial post..."
"When responding to your peers, try to address issues they've raised..."
- Model appropriate discussion participation.
- If any issues related to netiquette occur, respond to them immediately in a private communication or in the discussion if appropriate.
"I wanted to reach out to you about your recent discussion post, please review the discussion rubric concerning interactions with other students..."

Resources

For more information, refer to Are you Teaching Good Netiquette? from Arizona State University. <https://teachonline.asu.edu/2016/04/teaching-good-netiquette/>

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

CD6: Macro-level big picture on course content**From the Research Literature**

CD6: The instructor provides the macro-level big picture on course content.

- Provides rationale for assignments and topics.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- Describe the macro-level big picture of the course in the course introduction.
- Describe how assignments support course goals/objectives.
- Identify how lecture/module content aligns with course goals/objectives.

Instructor-Student Interactions

- When reminding students about an assignment, refer to the rationale for the assignment related to course goals/objectives.
"This discussion is intended to give you a broad set of tools which you will be able to use in deciding when and how to use different research techniques..." (Garrison, 2017)

Resources

For more information, refer to Characteristics of Effective Assignments from Brown University. <https://www.brown.edu/about/administration/sheridan-center/teaching-learning/course-design/learning-technology/online-assignments>

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

Direct Instruction [Page]

Direct Instruction involves both instructional design and instructor-student interactions in discussion forums. Click on the plus signs to open/close the breakout information below on each indicator of teaching presence in this category.

DI1: Providing valuable analogies	+
DI2: Providing examples and insights to advance understanding	+
DI3: Providing supportive demonstrations	+
DI4: Providing clarifying information	+
DI5: Reference outside materials and sources	+

[breakouts for each follow]

DI1: Providing valuable analogies**From the Research Literature**

DI1: The instructor provides valuable analogies.

- Attempts to rephrase/reformulate course material in ways that highlight similarities between content assumed to be understood and new content with the goal of making the material more comprehensible.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- Use analogies in lectures and other content to support learning.

Instructor-Student Interactions

- Use analogies in the discussion to help students understand new content. (Examples) <https://elearningindustry.com/7-tips-for-using-analogies-in-elearning>

Resources

Refer to Using Metaphors, Similes, and Analogies to Create Better Training from Convergence Training. <https://www.convergencetraining.com/blog/metaphors-similes-and-analogies-to-create-better-training>

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

DI2: Providing examples and insights to advance understanding**From the Research Literature**

DI2: The instructor provides useful examples and insights that advance student understanding of the topic.

- Attempts to make course content more comprehensible by providing examples that are substantive and advance understanding.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- Use examples in lectures and other content to support learning.

Instructor-Student Interactions

- Use examples in the discussion to help students understand new content.
"I was at a conference on linguistics, and I was particularly struck by what the speaker said..."

Resources

Learn more about How to Teach Concepts in eLearning from ShifteLearning.com. To enlarge the infographic, click on it. <https://www.shiftelearning.com/blog/teaching-concepts-with-e-learning>

Learn more about Six Ways to Use Examples to Teach Concepts from the eLearning Coach. http://theelearningcoach.com/elearning_design/examples-and-nonexamples/

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

DI3: Providing supportive demonstrations**From the Research Literature**

DI3: The instructor provides supportive demonstrations, like links to online simulations or websites.

- Attempts to make course content more comprehensible through demonstrations of process.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- Incorporate demonstrations and website links into lectures and other learning content to increase comprehension.

Instructor-Student Interactions

- In the discussion, refer students to links and demonstrations in the course, or provide new learning content as needed.
"You suggest you view this presentation on [topic] at this link, it provides some interesting insights on..."

Resources

For more information, view Demonstration Videos in the Online Lecture Toolkit. There are many aspects of demonstrations: the demonstration an instructor creates, video demonstrations from other sources, etc. <https://www.onlinelecturetoolkit.com/demonstration>

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DI4: Providing clarifying information**From the Research Literature**

DI4: The instructor provides clarifying information.

- Attempt to reduce confusion or misconceptions about course content by providing additional explanations.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- Use previous suggestions for incorporating analogies, examples, demonstrations, etc., into the instructional design of the learning content to clarify content.
- Use discussion forum prompts as opportunities to confirm understanding and determine if there are misconceptions so that clarification can be provided.

Instructor-Student Interactions

- Actively participate in discussions and provide clarifying information as needed.
"Remember, the author is presenting information from a public relations perspective...I would ask that you consider..."
"That's a great answer, one thing to consider, however, is that you didn't account for..."

Resources

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

DI5: Reference outside materials and sources**From the Research Literature**

DI5: The instructor references outside materials and sources.

- Provides useful information from a variety of sources, e.g., articles, textbooks, personal experiences, or links to external web sites.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- Incorporate outside materials and sources in the instructional design of the course to support the learning content.

Instructor-Student Interactions

- Suggest outside materials and sources when appropriate to provide clarifying information.
"You can find the conference proceedings at [link]..."
"There's a great book by Garrison that really informs this topic, you can access it at..."

Resources

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

Facilitating Discourse [Page]

Facilitating Discourse takes place entirely in discussion forums and involves instructor-student interactions that guide productive inquiry. Instructional design choices can also support effective instructor-student interactions. Click on the plus signs to open/close the breakout information below on each indicator of teaching presence in this category.

FD1: Identifying areas of agreement and disagreement	+
FD2: Guiding class towards understanding course topics	+
FD3: Developing a sense of community	+
FD4: Encouraging participants to explore new concepts	+
FD5: Keeping students engaged and participating	+
FD6: Presenting follow-up topics for discussion	+
FD7: Keeping students on-task and focused	+
FD8: Summarizing contributions and highlighting key concepts	+

[breakouts of each indicator follow]

FD1: Identifying areas of agreement and disagreement**From the Research Literature**

FD1: The instructor identifies areas of agreement and disagreement on course topics that help students to learn.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- None.

Instructor-Student Interactions

- Actively participate in discussions and guide inquiry appropriately based on best practices.
"Joe, Mary has provided a compelling counter example to your hypothesis, would you care to respond?"
"I think Hannah and Scott are essentially saying the same thing..." (Garrison, 2017)

Resources

To learn more, review [How to Promote Critical Inquiry in Online Discussion Forums](https://onlinelearninginsights.wordpress.com/2013/10/01/how-to-promote-critical-thinking-with-online-discussion-forums/) by onlinelearninginsights.wordpress.com. Includes a PPT presentation.

<https://onlinelearninginsights.wordpress.com/2013/10/01/how-to-promote-critical-thinking-with-online-discussion-forums/>

For more information on facilitating teaching presence, [click here](http://www.duq.edu/about/centers-and-institutes/center-for-teaching-excellence/teaching-and-learning/establishing-an-online-teaching-presence).

<http://www.duq.edu/about/centers-and-institutes/center-for-teaching-excellence/teaching-and-learning/establishing-an-online-teaching-presence>

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

FD2: Guiding class towards understanding course topics**From the Research Literature**

FD2: The instructor guides the class towards understanding course topics in a way that helped me clarify my thinking.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- None

Instructor-Student Interactions

- Actively participate in discussions and guide inquiry appropriately based on best practices.
"That topic seems to be a dead end, I would ask you to consider..." (Garrison, 2017)

Resources

To learn more, review [How to Promote Critical Inquiry in Online Discussion Forums](https://onlinelearninginsights.wordpress.com/2013/10/01/how-to-promote-critical-thinking-with-online-discussion-forums/) by onlinelearninginsights.wordpress.com. Includes a PPT presentation.

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For more information on facilitating teaching presence, [click here](http://www.duq.edu/about/centers-and-institutes/center-for-teaching-excellence/teaching-and-learning/establishing-an-online-teaching-presence).

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E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

FD3: Developing a sense of community**From the Research Literature**

FD3: The instructor's actions reinforce the development of a sense of community among course participants.

- Acknowledges student participation in the course, e.g., replies in a positive encouraging manner to student submissions.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- Include an "Introduce Yourself" discussion to help develop a sense of community in the course.
- Introduce yourself to students in the course introduction to build a sense of connection, include a picture.
- Encourage students to update their online LMS profiles and include a picture.

Instructor-Student Interactions

- Actively participate in the "Introduce Yourself" discussion and welcome students.
"Peter, Welcome, it's great to have you in the course...In your introductory post, I noticed you had some experience in... please share your insights in the discussion when we get to this topic."
- Use student names when responding in the discussion and respond positively.
"John, don't feel self-conscious about 'thinking out loud' in the discussion. This is the place to try out new ideas." (Garrison, 2017)
"Thank you for your insightful comments, Sue." (Garrison, 2017)

Resources

"A strong and active presence on the part of the instructor—one in which she or he actively guides the discourse—is related to students' sense of both connectedness and learning." (See Shea, Swan, Li, Pickett, 2006)

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.96.343&rep=rep1&type=pdf>

To learn more, review Types of Presence: Teaching Presence (scroll down to "Being Present from the Beginning: Introduce Yourself to the Class") from UC Davis.

<https://canvas.ucdavis.edu/courses/34528/pages/types-of-presence-teaching-presenc>

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

FD4: Encouraging participants to explore new concepts

From the Research Literature

FD4: The instructor encourages course participants to explore new concepts.

- Encourages students to explore concepts in the course, e.g., promotes the exploration of new ideas.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- Ensure discussion prompts promote inquiry and not summarization.
- Determine follow-up topics and new concepts for discussions as part of the instructional design of the course.

Instructor-Student Interactions

- Actively participate in discussions and guide inquiry appropriately based on best practices.
"Garrison says on this issue, what do you think?" (Garrison, 2017)

Resources

To learn more, review [How to Promote Critical Inquiry in Online Discussion Forums](https://onlinelearninginsights.wordpress.com/2013/10/01/how-to-promote-critical-thinking-with-online-discussion-forums) by onlinelearninginsights.wordpress.com. Includes a PPT presentation.

<https://onlinelearninginsights.wordpress.com/2013/10/01/how-to-promote-critical-thinking-with-online-discussion-forums>

For more information on facilitating teaching presence, [click here](http://www.duq.edu/about/centers-and-institutes/center-for-teaching-excellence/teaching-and-learning/establishing-an-online-teaching-presence).

<http://www.duq.edu/about/centers-and-institutes/center-for-teaching-excellence/teaching-and-learning/establishing-an-online-teaching-presence>

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

FD5: Keeping students engaged and participating**From the Research Literature**

FD5: The instructor keeps course participants engaged and participating in productive dialogue.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- None

Instructor-Student Interactions

- Actively participate in discussions and guide engagement appropriately based on best practices.
"Any thoughts on this issue? ... Anyone care to comment?"
"Garrison says in this week's reading...what do you think?"

Resources

To learn more, review *How to Promote Critical Inquiry in Online Discussion Forums* by [onlinelearninginsights.wordpress.com](https://onlinelearninginsights.wordpress.com/2013/10/01/how-to-promote-critical-thinking-with-online-discussion-forums/). Includes a PPT presentation.
<https://onlinelearninginsights.wordpress.com/2013/10/01/how-to-promote-critical-thinking-with-online-discussion-forums/>

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

FD6: Presenting follow-up topics for discussion**From the Research Literature**

FD6: The instructor presents follow-up topics for discussion.

- Presents content or questions related to the discussion.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- Ensure discussion prompts promote inquiry and not summarization.
- Determine follow-up topics for discussion as part of the instructional design of the course.

Instructor-Student Interactions

- Actively participate in discussions and guide inquiry appropriately based on best practices.
"Have you thought about what the next steps might be?" (Garrison, 2017)

Resources

To learn more, review [How to Promote Critical Inquiry in Online Discussion Forums](https://onlinelearninginsights.wordpress.com/2013/10/01/how-to-promote-critical-thinking-with-online-discussion-forums/) by onlinelearninginsights.wordpress.com. Includes a PPT presentation.

<https://onlinelearninginsights.wordpress.com/2013/10/01/how-to-promote-critical-thinking-with-online-discussion-forums/>

For more information on facilitating teaching presence, [click here](http://www.duq.edu/about/centers-and-institutes/center-for-teaching-excellence/teaching-and-learning/establishing-an-online-teaching-presence).

<http://www.duq.edu/about/centers-and-institutes/center-for-teaching-excellence/teaching-and-learning/establishing-an-online-teaching-presence>

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

FD7: Keeping students on-task and focused**From the Research Literature**

FD7: The instructor keeps course participants on task and focused discussions on relevant issues in ways that helps students to learn.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- None.

Instructor-Student Interactions

- Actively participate in discussions and guide engagement appropriately based on best practices.
"I think we're getting a bit off track here..." (Garrison, 2017)
"That's an interesting perspective, have you considered..."

Resources

To learn more, review *How to Promote Critical Inquiry in Online Discussion Forums* by [onlinelearninginsights.wordpress.com](https://onlinelearninginsights.wordpress.com/2013/10/01/how-to-promote-critical-thinking-with-online-discussion-forums/). Includes a PPT presentation.
<https://onlinelearninginsights.wordpress.com/2013/10/01/how-to-promote-critical-thinking-with-online-discussion-forums/>

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

FD8: Summarizing contributions and highlighting key concepts**From the Research Literature**

FD8: The instructor summarizes discussion contributions and highlighted key concepts and relationships.

- Reviews and summarizes discussion contributions to highlight key concepts and relationships to further facilitate discourse.

Expressions of Teaching Presence

Consider improvements in the following areas.

Instructional Design

- None.

Instructor-Student Interactions

- Actively participate in discussions based on best practices.
- Share discussion summaries/highlights with students.
"The original question was...John said...then Sue indicated...We concluded that..." (Garrison, 2017)

Resources

To learn more, review [How to Promote Critical Inquiry in Online Discussion Forums](https://onlinelearninginsights.wordpress.com/2013/10/01/how-to-promote-critical-thinking-with-online-discussion-forums/) by onlinelearninginsights.wordpress.com. Includes a PPT presentation.
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For more information on facilitating teaching presence, [click here](http://www.duq.edu/about/centers-and-institutes/center-for-teaching-excellence/teaching-and-learning/establishing-an-online-teaching-presence).
<http://www.duq.edu/about/centers-and-institutes/center-for-teaching-excellence/teaching-and-learning/establishing-an-online-teaching-presence>

E-Learning in the 21st Century: A Community of Inquiry Framework for Research and Practice, by Randy Garrison, 2017 (Routledge, 3rd Ed.)

Assessment [Page]

Assessment guides instructor-student interactions related to assignment, discussions, and course design feedback. Click on the plus signs to open/close the breakout information below on each indicator of teaching presence in this category.

AS1: Formative feedback on participation in discussion forums	+
AS2: Feedback on assignments	+
AS3: Timeliness of assignment feedback	+
AS4: Summative feedback on participation in discussion forums	+
AS5: Summative feedback on course as a whole	+
AS6: Formative assessment on course design	+

[breakouts of each indicator follow]

AS1: Formative feedback on participation in discussion forums**From the Research Literature**

AS1: The instructor provides ongoing (formative) feedback on student participation in discussion forums during the course.

- Explicitly evaluate discussion/offer feedback or diagnose misconceptions to help students learn (also see diagnosing misperceptions from *Direct Instruction*).

Expressions of Teaching Presence

If your continuing professional development course includes asynchronous discussions, consider improvements in the following areas.

Instructional Design

- Build formative feedback on student discussion forum participation into instructional design by including a grade for each individual discussion.

Instructor-Student Interactions

- Provide feedback on participation to students in responses in the discussion.
"Sue, you offer a compelling argument..."
- Provide a grade for a discussion with specific feedback on the student's participation.

Resources

Fostering the Assessment of Asynchronous Discussions in Online Classroom: Impact of Formative Feedback, Cross & Mandernach (2013)

AS2: Feedback on assignments**From the Research Literature**

AS2: The instructor provides feedback on assignments that helps students understand their strengths and weaknesses.

- Explicitly evaluates other assignment types/offers feedback or diagnoses misconceptions to help students learn.

Expressions of Teaching Presence

If your continuing professional development course includes assignments, consider improvements in the following areas.

Instructional Design

- Build feedback on assignments into instructional design by including a grade for each assignment with the opportunity to include written feedback (see Resources below).
- Consider including a rubric for each assignment to enhance student understanding and streamline instructor feedback. If available, incorporate the rubric into the assessment grade in the LMS and provide feedback directly in the rubric. (Examples) <https://www.cmu.edu/teaching/assessment/assesslearning/rubrics.html>

Instructor-Student Interactions

- Assign a grade and provide personalized feedback to students on their strengths and weaknesses related to the assignment. (Examples) <https://blogs.commonsgorgetown.edu/jco34/sample-assignments/examples-of-feedback-on-student-writing/>
- If available, use a rubric and personalized comments.

Resources

Additional guidance on providing feedback can be found here: [Assessment Toolkit: Giving Student Feedback, University of New South Wales, Australia](https://teaching.unsw.edu.au/printpdf/537) (click to enlarge). <https://teaching.unsw.edu.au/printpdf/537>

AS3: Timeliness of assignment feedback**From the Research Literature**

AS3: The instructor provides feedback on assignments in a timely manner.

Expressions of Teaching Presence

If your continuing professional development course includes assignments, consider improvements in the following areas.

Instructional Design

- Consider putting specific dates or timeframes in the assignment instructions for when students can expect feedback to be returned.
"You should expect feedback by Friday..."
"It usually takes at least a week to receive feedback..."

Instructor-Student Interactions

- Practice good time management to provide feedback in a timely manner so the assessed work is still fresh in the student's mind.

Resources

For more information, visit: Assessment Toolkit: Giving Student Feedback, University of New South Wales, Australia <https://teaching.unsw.edu.au/printpdf/537>

AS4: Summative feedback on participation in discussion forums**From the Research Literature**

AS4: The instructor provides overall feedback (summative) on my participation in discussion forums at the end of the course.

- Provides post-mortem feedback on discussions, including grades.

Expressions of Teaching Presence

If your continuing professional development course includes asynchronous discussions, consider improvements in the following areas. Also, refer to AS1 related to formative discussion feedback for general guidance.

Instructional Design

- Incorporate an overall discussion grade with the opportunity to provide comments into the course.

Instructor-Student Interactions

- Assign a final discussion grade and provide feedback on discussion participation by evaluating the student's achievements in the course.
"Gary, your contributions to the discussion enhanced the class' discourse, especially related to..."

Resources

For a helpful infographic on the difference between formative and summative feedback, [click here](https://www.bookwidgets.com/blog/2017/04/the-differences-between-formative-and-summative-assessment-infographic). <https://www.bookwidgets.com/blog/2017/04/the-differences-between-formative-and-summative-assessment-infographic>

AS5: Summative feedback on course as a whole**From the Research Literature**

AS5: The instructor provides overall feedback (summative) on student performance in the course as a whole.

- Provides post-mortem feedback on other assignments, including grades.

Expressions of Teaching Presence

If your continuing professional development course includes assignments, consider improvements in the following areas.

Instructional Design

- Incorporate a final grade into the instructional design of the course and include an option for summative feedback.

Instructor-Student Interactions

- Assign a final grade and provide summative, personalized feedback evaluating the student's achievements in the course.
"Jane, you performed well in the course and demonstrated a solid understanding of..."

Resources

For a helpful infographic on the difference between formative and summative feedback, [click here](https://www.bookwidgets.com/blog/2017/04/the-differences-between-formative-and-summative-assessment-infographic). <https://www.bookwidgets.com/blog/2017/04/the-differences-between-formative-and-summative-assessment-infographic>

AS6: Formative assessment on *Course Design***From the Research Literature**

AS6: The instructor solicits formative assessment on *Course Design* and learning activities from students and other participants.

- Seeks feedback upon completion of modules or during mid-course.

Expressions of Teaching Presence

If your continuing professional development course is of short duration, your instructional design may not include formative assessment of *Course Design* and learning activities.

Instructional Design

- Incorporate a formative assessment on *Course Design* and learning activities, which usually consists of the *post-course student survey* and/or the *Post-course rubric*.

Instructor-Student Interactions

- Implement the assessment/survey at the appropriate time during the course and review responses (and provide to program administrator to review). Make improvements to instructional design and learning assessments as appropriate.

Resources

For more information on the benefits and how to's for mid-course evaluation, courtesy of Brigham Young University, [click here](http://ctl.byu.edu/benefits-mid-course-evaluations). <http://ctl.byu.edu/benefits-mid-course-evaluations>

Creating a Cycle of Continuous Improvement [Section]

How to Measure Teaching Presence [Page]

As you learn more about teaching presence, you will begin to implement changes to your practice and instructional design. Measuring teaching presence using *post-course student surveys* and *pre-* and *post-rubrics* provides the information you need to determine if improvements are effective and allows you to continue to make iterative improvements to practice and design over the life cycle of an online course.

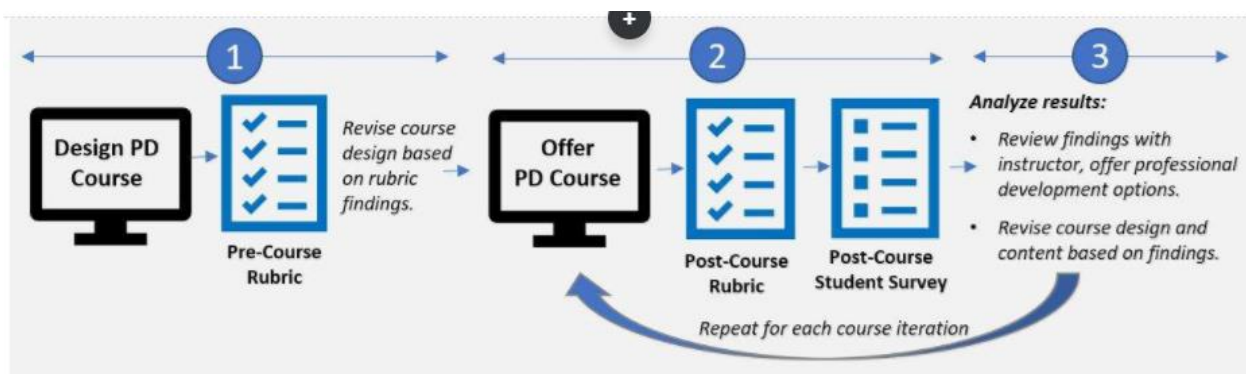


Teaching presence can be measured objectively using *pre-* and *post-course rubrics* administered by program administrators to evaluate course content, and subjectively using a *post-course student survey*. The *pre-course rubric* confirms teaching presence is adequately represented in the instructional design of a course and improvements can be made prior to delivery. Then, every time the course is offered, the *post-course student survey* collects student feedback on instructor practice and the *post-course rubric*

confirms expected instructor actions took place.

Below, the *pre-* and *post-course rubrics* and *post-course student survey* are described, and suggestions made for how to interpret the results. Also described is the *Instructor Scorecard* used to compile and track *post-course student survey* results for instructors. While your program administrator will administer these measurement tools and collect data after every course, you will work together to evaluate the data and identify and implement any needed improvements to practice and instructional design. This iterative process creates a cycle of continuous improvement (shown below).

To learn more about teaching presence measurement and evaluation methods, please review the *Teaching Presence Evaluation Toolkit*.

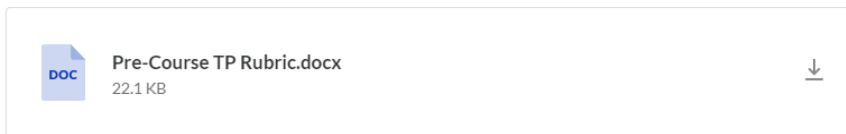


Pre-Course Rubric

Before the first iteration of an online continuing professional development course, program administrators will administer a *pre-course rubric* to evaluate teaching presence in instructional design and provide feedback to instructors. The program administrator will provide instructors with a copy of the completed rubric with written feedback on indicators in need of improvement. Once areas in need of improvement are identified, review the *Improving Practice & Instructional Design* section of this course for additional information on how teaching presence indicators can be expressed in a course to align design with best practices. The *pre-course rubric* has the added advantage of providing a template for initial course design.

[Link active only in e-learning version]

To download the *pre-course student survey*, click on the link below.

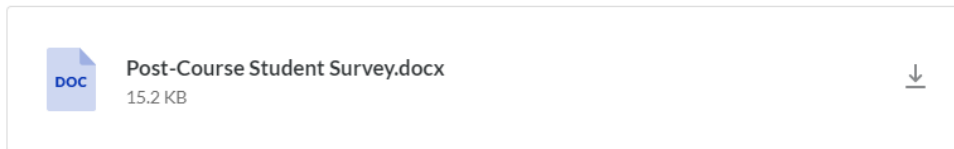


Post-Course Student Survey

Student feedback can provide important insights into instructor practice. This is an opportunity to collect student perceptions of the active participation of the instructor to guide inquiry and foster interaction in the discussion. The program administrator will administer the *post-course student survey* and determine the ratings threshold below which improvements to practice are suggested. Student ratings are based on a 5-point Likert agreement scale, and, once the survey data is compiled, a *presence score* will be determined for each teaching presence indicator and added to the *Instructor Scorecard*.

[Link active only in e-learning version]

To download the *post-course student survey*, click on the link below.



Post-Course Rubric

Program administrators will administer a *Post-Course Rubric* to objectively confirm that instructor actions expected to take place in a course as part of good practice actually did. The program administrator will provide instructors with a copy of the completed rubric with written feedback on indicators that may be in need of improvement. The rubric is also a useful guide for an instructor to refer to during a course. Please review the *Post-Course Rubric* and *Post-Course Student Survey* together for a more complete picture of your practice during the course.

To download the *Post-Course Rubric*, click on the link below.

[Link active only in e-learning version]



Post-Course TP Rubric.docx
23.3 KB



Instructor Scorecard

The *Instructor Scorecard* presents *post-course student survey* data using an easy to interpret presence score, which provides a meaningful frame of reference based on a scale of 0 – 100%. Student comments are also included in the *Scorecard*, which is meant to be reviewed together with the *post-course rubric*, so data related to indicators that appear in both measurement tools can be considered at the same time.

The presence score is determined by the average the student rating for each survey item divided by the highest possible rating (5 = Strongly Agree), then multiplying this number by 100%.

[To view *Instructor Scorecard*, refer to toolkit]

Instructor Scorecard		
Instructions: Compare <i>Post-Course Student Survey</i> presence scores for each survey question against your goals to identify areas in need of improvement. All indicators in the survey are also evaluated in the <i>Post-Course Rubric</i> , so review both data together for a more complete picture of teaching presence to guide improvements to practice. Scale: Strongly Disagree = 0-39%; Disagree = 40-59%; Neutral = 60-79%; Agree = 80-100%	Presence Score (% of 5.0)	Presence Goal
1. The instructor helped focus the discussion on relevant issues and kept course participants on task, engaged, and participating in productive dialogue. [FD5, FD7]	73%	95%
2. The instructor provided useful examples, insights, and analogies that advanced my understanding of course topics. [DI1, DI2]	78%	95%
3. The instructor guided the class towards understanding course topics in the discussion in ways that helped me clarify my thinking. [FD2]	72%	90%
4. The instructor provided clarifying information on course topics. [DI4]	78%	90%
5. The instructor provided feedback on assignments in a timely manner that helped me understand my strengths and weaknesses. [AS2]	78%	90%
6. The instructor identified areas of agreement and disagreement on course topics in the discussion in ways that helped me to learn. [FD1]	66%	90%
7. The instructor provided the macro-level big picture on course content and clearly communicated important course topics and goals. [CD1, CD6]	80%	95%
8. The instructor provided clear instructions on how to participate in course learning activities. [CD2]	64%	90%
9. The instructor reinforced the development of a sense of community among course participants. [FD3]	58%	90%
10. Overall, I was satisfied with my learning experience in this course.	72%	90%
11. Do you have any suggestions for what would have made your learning experience better? [open-ended]		

Presence Score: (Average Student Rating/Highest Rating) x 100%

For example, if for question 1 of the survey the average student rating was 3.65, the presence score would be calculated as $(3.66/5) \times 100\% = 73\%$.

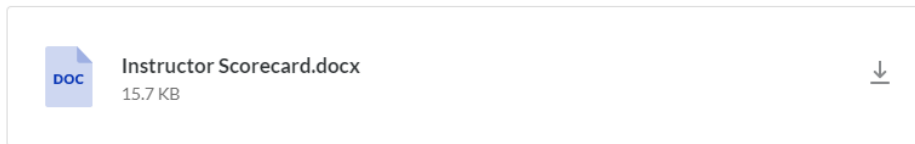
The scale for the presence scores is follows:

Strongly Disagree = 0-39%; Disagree = 40-59%; Neutral = 60-79%; Agree = 80-100%

Review the *Improving Practice & Instructional Design* section of this course for additional information on how teaching presence indicators can be expressed in instructor practice.

To download the *Instructor Scorecard*, click on the link below.

[Link only active in e-learning version]



Conclusion [Page]

Now that you have a better understanding of the construct of teaching presence, how it can be expressed in both practice and instructional design, and how to measure practice to guide improvements, you're ready to get started!

To summarize, in this course, we:

- Defined the Community of Inquiry's construct of teaching presence related to online instructor-student interactions and course instructional design.
- Considered teaching presence best practices as a starting point for making improvements to practice and design.
- Examined how teaching presence can be measured and evaluated to guide iterative improvements.

The best practices outlined in *Improving Teaching Presence in Online Courses* add to a community of practice using teaching presence to guide instructor practice and instructional design. As you work to improve your own teaching presence, you are invited to contact the author with feedback, suggestions, or questions. Please email Jen Chingwe at jchingwe@rutgers.edu.

Resources & References [Page]

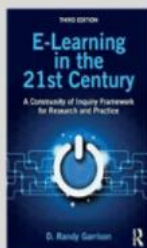
**Teaching Presence
Evaluation Toolkit**

The *Teaching Presence Evaluation Toolkit* was developed to assist program administrators to measure and evaluate teaching presence in online continuing professional development courses.

Below are additional resources and references for further information.

Additional Resources

Join the Community of Inquiry site (<https://coi.athabascau.ca/>), run by Dr. Randy Garrison, for more information on the COI model, COI research papers, blogs, book recommendations, presentations and useful links, free webinars, and peer discussion forums.

**[E-Learning in the 21st Century](#) (3rd edition)**

This book provides an overview of understanding e-learning in higher education based on the Community of Inquiry model. Available from Amazon.com.

Chapter 5: Learnings, Reflections, and Implications

There is a gap in our understanding of which COI methods are most appropriate for measuring different types of teaching presence and how best to apply them in non-research settings. As an instructional designer of online continuing professional development courses, my dissertation study and portfolio deliverables enabled me to explore the affordances of COI methods and their practical application to collect data to guide improvements to instructor practice. My dissertation study identified that, for the courses analyzed and student sample, content analysis methods were better than student surveys at capturing the quantity and location of teaching presence, and also made a useful distinction between teaching presence related to instructional design as compared to instructor-student interactions that take place during a course. A limitation of content analysis was its focus on quantity and not quality -- some indicators with low counts received high ratings from students, while others with high counts received low ratings. Anderson et al. (2001) noted a similar phenomenon, finding that low or high counts of teaching presence in course discussions, without an understanding of the quality of expression of teaching presence, may not accurately evaluate instructor practice. The student survey, however, did a better job at collecting student perceptions of presence and quality for instructor-student interactions and the more subjective aspects of teaching presence related to instructional design, and had the advantage of an absolute scale to identify or flag particular aspects for improvement. However, the student survey did not provide information on frequency of occurrence or location of teaching presence related to instructional design, and it was difficult to differentiate if low student ratings reflected a lack of presence or poor quality of expression.

Given the relative advantages of the two methods, I considered how to translate them from a research context to practice related to measuring teaching presence in continuing professional development settings. The results of my dissertation study guided the development of *pre-* and *post-course rubrics* and a modified *post-course student survey* to measure teaching presence in instructional design and instructor-student interactions. To best evaluate instructional design, I determined that a guided *pre-course rubric* that confirmed the location, quantity, and expected quality of expression of teaching presence might serve as a more practical version of content analysis. Also, because traditional COI content analysis is conducted post-course, it would be beneficial to evaluate instructional design pre-course in order to make improvements to design before course delivery.

The student survey was modified to include only indicators of teaching presence related to instructor-student interactions and the more subjective aspects of instructional design. I decided to omit indicators of teaching presence related to instructional design that could be evaluated objectively using the *pre-course rubric*, such as whether information on netiquette was provided to students (CD5.1). Since the locations of instructor-student interactions were already known to take place in discussions, grades, and feedback, a full content analysis in addition to surveying students was not necessary, particularly since my study found that student perceptions of the quality of instructor-student interactions were more useful than code counts to evaluate practice during a course. I also consolidated several indicators in the modified *post-course student survey* that were similar in nature. In addition, because student perceptions are not always reliable, I decided a *post-course rubric* was also necessary to generally confirm that certain expected instructor-student interactions took place during the course – such as providing grades and feedback and generally participating in course discussions.

The design of the *pre-course rubric* was enhanced by my review of available literature and guidance on existing best practices to guide the rubric's evaluation of teaching presence in instructional design, particularly since the expression of teaching presence in design is an area of emerging research. I used the information collected during this review, my dissertation study results, available guidelines from COI researchers, and my experience as an instructional designer, to develop the *Teaching Presence Evaluation Toolkit* and related measurement tools and consider how they might apply in different settings. The course, *Improving Teaching Presence in Online Courses*, also came out of this research. My overall recommendations for an iterative approach to improving teaching presence in online courses included:

- (1) a *pre-course rubric* to evaluate the expression of teaching presence in instructional design prior to course delivery;
- (2) a *post-course student survey* to collect student perceptions of instructor-student interactions related to teaching presence and subjective aspects of instructional design after every course iteration;
- (3) a *post-course rubric* to objectively confirm key instructor-student interactions took place after every course iteration.

There are wide-ranging implications for the transition of the Community of Inquiry Model, its construct of teaching presence, and related measurement tools, to continuing professional development settings. While institutions of higher education have offered instructor-led online professional development courses for some time, this is a relatively new area of endeavor for companies wanting to develop and offer time-bound, instructor-led courses internally for their own employees. The COI construct of teaching presence and the suggested measurement approaches and tools offered as a result of my dissertation study

provide a good starting point to guide practitioner decisions related to improving instructional design and instructor-student interactions in online courses. The *pre-course rubric* developed in this study also adds to the limited number of research-based rubrics available to evaluate the instructional design of continuing professional development courses, but with a more focused consideration of the design decisions that relate to good instructor practice.

A follow-up to my dissertation study could include using a design-based research approach to assess the impact of several cycles of iterative improvements using the *pre-* and *post-course rubrics* and modified *post-course student survey* included in the toolkit. Similar to Swan et al.'s (2014) study, the *pre-course rubric* could be used to evaluate and improve instructional design prior to course delivery, and the modified *post-course student survey* and *post-course rubric* applied after each course iteration to confirm improvements and guide practice. Instructors could also complete the course on teaching presence as a part of the intervention. Increases in student survey ratings of teaching presence and *post-course rubric* results would confirm if there were measurable improvements over time.

Future consideration could also be given to incorporating the COI model's other key elements, social and cognitive presence, into measurement tools developed as a result of this study. These presences have their own indicators and best practices, and further research could consider how they impact instructor practice, and, how best to measure them to ensure their adequate representation in instructional design and instructor-student interactions. An omission in the COI model that should also be addressed is the lack of Section 508 of the Rehabilitation Act of 1973 standards related to instructional design and practice, as most continuing professional development providers are required to follow these guidelines. Adapting COI

approaches and related measurement tools to reflect inclusion of these standards would be beneficial and make the student online learning experience more inclusive.

My intention is to disseminate the *Teaching Presence Evaluation Toolkit* and the course, *Improving Teaching Presence in Online Courses*, to learning and development professionals using social media and other platforms. A future enhancement to these deliverables would be to bring the toolkit and course more in line with the COI model by adding activities and online discussions to enhance the learning experience. Participants would be encouraged to apply the *pre-* and *post-course rubrics* and *post-course student survey* to iteratively guide improvements to practice in their own settings and share their experiences.

The portfolio dissertation allowed me to study COI methods of measuring and evaluating teaching presence and address a significant gap in the literature. The results of the study and my own additional research supported my efforts to transition these methods and approaches to continuing professional development settings through the toolkit and course. In my professional work, I have already begun to apply the principles outlined in the course and use the measurement tools developed in the toolkit. I co-designed and developed the first 5-week instructor-led online course on leadership for an agency of the federal Department of Labor. The *pre-course rubric* served as an instructional design guide for this course, and the *post-course student survey* was modified for this audience and the results used to guide improvements to practice in the next course iteration. I have also used approaches for applying teaching presence to instructional design and instructor-student interactions to design continuing professional development online learning environments that support facilitator-led inquiry of cross-functional problem-solving teams.

I have found in my own work that the construct of teaching presence is broadly applicable to instructor-led, online continuing professional development learning experiences, and related measurement tools provide the opportunity to iteratively guide improvements to practice. As the construct of teaching presence is used and applied more widely, and more consideration is given to its expression in instructional design and instructor-student interactions, we will need to continue to evaluate the affordances of COI measurement tools to guide practice. Similar to the continued development of the COI student survey by multiple research teams, now in its 14th version (Swan et al., 2008), this study and dissertation are part of a long-term personal endeavor to understand the best approaches to evaluate and improve instructor practice in online courses. It is my hope that this effort will be embraced and improved upon by the wider research and practitioner community.

References

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