

# Creating an Effective Online Teaching Presence

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## Abstract

Against the backdrop of declining enrollment in teacher education programs, high levels of student demand for online education, and student, administrative, and faculty concern over quality and comparability of online programs to traditional face-to-face programs, this article shines a light on one graduate program's effort to preserve program quality when shifting from a face-to-face (later turned hybrid) teacher licensure degree program to an accelerated, fully asynchronous online program. This case study highlights faculty-led efforts to engage in evidence-based course design based on the Community of Inquiry framework, initially paying focused attention to one element of the framework: teacher presence. The results of this case study suggest that enhanced knowledge and application of strategies that promote teaching presence may be helpful in fostering online student success and satisfaction. The results also offer practical support for educators that turn the tenets of teaching presence as a theory to actions, strategies and behaviors for achieving it.

*Keywords:* online education, community of inquiry, teacher presence, instructor presence

Against the backdrop of declining enrollment in teacher education programs, high levels of student demand for online education, and student, administrative, and faculty concern over quality and comparability of online programs to traditional face-to-face programs, this article shines a light on one graduate program's effort to shift from a face-to-face (later turned hybrid) teacher licensure degree program to an accelerated, fully asynchronous online program.

## Purpose of the Study and Research Question

Presented here is the case study of faculty-led efforts to redesign a graduate degree program to address the criticisms and concerns over online learning quality and to implement evidence-based course design and andragogy aligned with one empirically studied framework for quality online teaching. While many facets define what constitutes quality in an online learning environment, this article shares only details related to the role of faculty in designing and delivering quality learning. It sought to answer the question: When faculty implement specific strategies

and behaviors focused on creating and maintaining teaching presence in online courses, does it result in student perception of teaching presence and contribute to improved student engagement and satisfaction?

## Review of the Literature

### Why is Teaching Presence Important to Quality Online Education?

The relationship between student and instructor is central to the learning process. Instructional settings characterized by frequent and meaningful instructor-student interactions have consistently supported student achievement and learning satisfaction (Cornelius-White, 2007; Witt, Wheelless, & Allen, 2004). There is no debate that interpersonal interaction is considered one of the most crucial course quality factors in online learning (Mehall, 2020; Vlachopoulos & Makri, 2019; York & Richardson, 2012), but there are challenges. Mehall (2020) stressed that a lack of clarity in interpersonal interactions detracts from more profound learning. Paired with the likelihood that many online instructors have insufficient guidance for

designing and enacting a quality online degree program, it is easy to understand why the misconception that the same strategies used in face-to-face classrooms are transferable to an online learning format. Paquette (2016) identified that some online instructors lack the knowledge of using strategies that encourage virtual interactions. Strategies that influence interpersonal interaction include the course environment and community, group work and discussion, assessment, feedback, and instructor participation, among others (York & Richardson, 2012).

Anderson et al. (2001) suggested that when teacher presence is planned in the course design, in the facilitation of course content, and in direct instruction, it builds a cognitive presence in students and promotes higher-order thinking. More recently, Wang and Liu (2020) conducted a study on instructors' online teaching presence and its effect on students' interactions and collaborative knowledge constructions. Their findings highlighted that design and organization are essential to students' interactions and collaborative knowledge construction and suggest it can improve student engagement. Finally, Zhang et al. (2016) investigated the connection between teacher presence and engagement. They concluded that teaching presence positively impacted learners' constructive and interactive engagement behaviors.

Teacher presence can also contribute to student satisfaction. A meta-analysis conducted by Caskurlu et al. (2020) studied the relationship between teaching presence and students' satisfaction and learning. Their results indicated a moderately strong positive correlation between teacher presence and student satisfaction. Additional research confirms that teaching presence significantly impacts student satisfaction (Liman Kaban, 2021; Kim & Kim, 2021; Soffer & Nachmias, 2018; Wengrowicz et al., 2018).

### Quality Online Teaching

It is unlikely that any other topic in education has generated as much discussion and controversy as the notion of 'quality.' Discussions of quality often include references to accreditation, quality assurance processes, the connection of those quality assurance processes and learning outcomes, and recognizing the differences in context (be it lab courses, face-to-face seminar-style courses, or online courses). Without a doubt, the same controversy exists when defining and examining quality online education (Dumford & Miller, 2018; Hurlbut, 2018; Ware, 2018; Weldy, 2018). More than two decades of research have attempted to define quality in online education and apply various means for assessing the quality of online courses and programs. Existing online education quality

measures have considered quantitative or qualitative approaches. They can be viewed within four broad categories (Mitchell, 2010): stakeholder perceptions (i.e., administration, students, instructors), quantifiable elements (i.e., grades, retention rates, graduation rates), course design elements, and external standards (i.e., developed by various external groups and organizations including accrediting agencies, lawmakers, colleges, and groups such as Quality Matters, Online Learning Consortium/the Sloan Consortium).

Returning adult students often desire the flexibility afforded by online learning and the freedom to work school schedules around the other priorities of their lives. Institutions recognize that online courses and programs are leading enrollment growth areas in a time of declining higher education enrollment. The criticism of online learning from faculty and administration suggests that reduced learning outcomes and students' feelings of isolation are notable limitations that point to the importance of a research-based design of teacher education programs and courses.

A vast amount of research has contributed to the development of standards and guidelines for distance learning programs. Therefore, the researchers looked for a way to adopt and implement quality standards or guidelines that allowed them to focus on teaching methods that successfully help learners develop the knowledge and skills linked to program learning outcomes. Therefore, after examining their institutional mission and strategic priorities, resources, and expertise, the research team adopted the Community of Inquiry (COI) framework as the guidelines that shaped program design and delivery. The choice of this framework allowed researchers to align with existing institutional standards, define elements to be assessed to determine quality, and measure unique elements of the online courses/program above and beyond the institution's current assessment of program quality.

COI is a theoretical framework for designing online learning environments to support critical thinking, critical inquiry, and discourse among students and teachers (Garrison et al., 2000). The COI framework posits that certain essential elements within an online course can facilitate successful online learning environments. First, it contended that higher-order learning is facilitated by a "community of inquiry" composed of teachers and learners (Arbaugh et al., 2008). Grounded in John Dewey's (1938) view of practical inquiry, Garrison et al. (2000) first introduced the COI framework. The COI framework represents a process of creating deep and meaningful (collaborative-constructivist) learning through the development of

three interdependent elements – social, cognitive, and teaching presence. 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 interpersonal relationships by way of projecting their personalities” (Garrison, 2009, pg. 352). Cognitive presence is the extent to which learners can construct and confirm meaning through sustained reflection and discourse (Garrison, Anderson, & Archer, 2001). Finally, teaching presence is the design, facilitation, and direction of cognitive and social processes to realize personally meaningful and educationally worthwhile learning outcomes (Anderson et al., 2001; Garrison & Arbaugh, 2007; Garrison et al., 2000).

Research has shown a relationship between the three presences and students’ perceived learning, satisfaction with the course, the instructor, actual learning, and sense of belonging (Akyol & Garrison, 2008; Arbaugh, 2008; Richardson et al., 2017). This research focuses on one graduate program’s considerations to foster enhanced teaching presence.

### Teacher Presence as a Construct: What is Teacher Presence?

Teaching presence is defined in the COI model as “the design, facilitation, and direction of [student] cognitive and social processes to realize personally meaningful and educationally worthwhile learning outcomes” (Anderson et al., 2001). Teaching presence is the “binding element” that connects an online learning community and makes possible the cognitive and social activities required for effective online learning (Garrison et al., 2000; Garrison & Cleveland-Innes, 2005). Teaching presence has three components: (1) **instructional design and organization** (e.g., setting curriculum, designing methods); (2) **facilitating discourse** (e.g., setting course climate, acknowledging or reinforcing student contributions); and (3) **direct instruction** (e.g., summarizing the discussion, presenting content/questions) (Anderson et al., 2001). These elements of teaching presence offer guidelines to help online instructors enhance collegiality and learning among online students.

Teaching presence begins prior to any interactions with students through the **design and organization of an online course** (Arbaugh, 2007). This aspect of instructor presence includes instructor decisions regarding course goals, timetables, and curricular materials and highlights the instructor’s role as the primary designer and administrator of students’ learning experience (Anderson et al., 2001). Successfully fulfilling this role requires instructors to clarify learning outcomes and ensure a strong link between learning

activities and assessments. Doing this well supports students navigating a course and constructing meaning from instructional content. Other important considerations regarding this facet of instructor presence include (1) planning and design of the structure, interaction, and evaluation aspects of an online course (including the clear, consistent structure of the course in the learning management system), (2) planning for a mix of individual and group tasks, (3) offering guidelines for use and interaction in the online course, and (4) providing insights into course materials.

Instructors also play a critical role in **facilitating discourse** among course participants. This facet of instructor presence is completed in concert with learners while learning occurs. Students are engaged in interacting about and building upon instructor-provided course materials. Learning outcomes are improved when students actively participate in collaborative dialogues with other participants (peers and teachers) through discussions that personalize, challenge, and expand on the topics covered in class. As a result, instructors have a primary role in promoting productive discourse by (1) focusing class discussions, (2) raising pertinent questions, (3) finding areas of disagreement and consensus, and (4) moderating student participation (Shea, Li, & Pickett, 2006), including redirecting off-track discussions, addressing misconceptions and drawing out inactive students/limiting dominating participants.

Finally, teaching presence depends on the practical and frequent use of **direct instruction**. Direct instruction entails the instructor exercising intellectual and scholarly leadership as a subject matter expert through the coherent content presentation, the injection of external resources or differing perspectives, and conducting evaluative activities, such as providing feedback or assessing student understanding (Garrison & Cleveland-Innes, 2005). Bernard et al. (2004) noted that these interactions between teacher and student do not require synchronicity; in fact, Bernard’s research suggests that online courses employing a practical asynchronous approach often achieve greater student achievement than those mandating frequent synchronous interactions.

## Research Design and Methods

### Setting and Participants

The data for this study were gathered from students enrolled in an asynchronous online Master’s Program in education at a small Midwestern public university. The online Master’s Program is an accelerated, 12-month, asynchronous online program that grants

a Master's degree and initial teaching licensure in business education. The program enrolls 15-20 students annually in a cohort program. This study collectively examined the teaching presence of 2 full-time tenured or tenure track faculty in the program. For this study, the total population of two cohorts of graduate students (N= 34) were invited to complete the survey between December 2021 and January 2022 via a confidential electronic survey administered on Qualtrics.

### Research Design

To examine the teaching presence of this online graduate program, this research used a descriptive case study approach (Yin, 2009) to build an explanation of teaching presence behaviors, actions, and strategies and gather baseline information about student perceptions of these efforts their course experience.

### Data Collection Instrument: How has Teacher Presence been measured?

The Community of Inquiry framework has been examined for decades. Initially, content analysis methodology (Anderson et al., 2001; Garrison et al., 2000) was used to examine the framework, and later, a 42-item instrument was developed, piloted, and modified for use to study the three presences that make up the framework (Shea et al., 2003). Shea et al. (2006) explored the factor structure of the teaching presence scale of that initial instrument. Seventeen of 20 items loaded successfully into two teaching presence components: direct instruction and instructional design and organization. Arbaugh and Hwang (2006) later examined teaching presence in online MBA courses. They found that 16 of the 20 teaching presence items loaded successfully into the three teaching presence components: direct instruction, instructional design and organization, and facilitating discourse. Arbaugh, in 2007, noted that the originators of the framework were mainly the ones who researched the framework and that the individual components of the COI framework were the most examined empirically. This claim spurred a flurry of research by others to examine and empirically measure the COI framework. Arbaugh et al. (2008) examined all components of a 34-item COI framework instrument using principal component analysis, testing the construct validity of the social, cognitive, and teaching presence sections with online graduate students. Thirteen items from that scale were determined to measure the teaching presence construct effectively. Zhang et al. (2016) utilized that same 13-item teaching presence instrument identified by Arbaugh et al. (2008) to measure teaching presence. For this study, the researchers used that same 13-item Arbaugh teaching presence scale and

added several qualitative (open-ended) response items to consider for program improvement purposes. The researchers acknowledge that the teaching presence scale can provide more robust analysis than is planned for this case study but will serve as a tool to explore student perceptions to inform future research plans. The 13-item teaching presence instrument uses a 5-point scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) to identify the student responses. In addition, descriptive analysis (including frequencies, mean, and standard deviation) was conducted.

### Design elements focused on establishing an effective Teaching Presence

Effective instructor presence has three distinct components: a purposeful instructional design and organization of the course, planned facilitation of discourse, and direct instruction. The instructional design and organization of the course is the element that is "most likely to be performed exclusively by the instructor" (Swan et al., 2008). This program used the user interface as a critical consideration in course design, and each course shared the same format, organization, and structure. The course content was arranged the same in each course, including text style, font, and headings.

Preparing course materials that continually engage and motivate students in course discussion is another design element of effective instructor presence. Unlike instructional design and organization, this component directly relates to the instructor interacting with students. Rovai (2007) indicated the instructor's role in facilitating discourse includes providing opportunities for students to:

- Get to know each other and learn about others backgrounds
- Use a variety of social learning activities
- Demonstrate knowledge and skill proficiencies
- Manage patterns of offending dialog
- Support an inclusive online learning environment

The use of direct instruction is the final component of establishing instructor presence. Vaughan et al. (2013) describe the importance of direct instruction to provide leadership above and beyond the role of facilitator. This premise requires the instructor to have both content and teaching expertise "to anticipate and proactively shape the environment and direction of the educational process in real-time" (Vaughan et al., 2013, p. 65). In its broadest sense, the role of the instructor is to establish a collaborative environment, with equal responsibility of students to participate in facilitating and directing the academic goals and processes of the educational experience.

The literature reveals a vast amount of research on teacher presence and strategies to improve one's teaching practice. For example, Garrison and Arbaugh (2007) indicated the need for practical strategies and guidelines for facilitating teaching presence from a real-world pedagogical perspective. Gleaning suggestions from research (Anderson et al., 2001; Baker, 2010; Dunlap & Lowenthal, 2018;

Lowenthal & Parscal, 2008; Richardson et al., 2009; Watson et al., 2017), the researchers selected many techniques, behaviors, and strategies to create and maintain effective teacher presence online shown in Table 1. In addition, faculty evaluated their online courses for these strategies using the OLC Quality Scorecard.

**Table 1**

### Instructor Behavior, Strategies, and Examples to Facilitate Teacher Presence

Teacher Presence Component	Instructor Behavior/Strategies/Examples
Instructional Design and Organization	<ul style="list-style-type: none"> <li>• Consistent, easy to navigate course format</li> <li>• Explicit instruction on teacher to student, student to student interactions</li> <li>• Sharing of Course overview and Welcome message: Explains how the course operates and how to navigate within the course</li> <li>• Offering synchronous class meetings at the beginning of the course to provide an orientation of the LMS</li> <li>• Assessments are aligned to the course and program learning outcomes</li> <li>• Video-recorded lectures with note-taking support</li> <li>• Individual, small group, large group instructional activities in synchronous and asynchronous formats</li> <li>• Sharing well-aligned readings and/or audio podcasts</li> </ul>
Facilitating Discourse	<ul style="list-style-type: none"> <li>• Discussion board used as a tool for large and small group discussion</li> <li>• Asking students to complete small group tasks</li> <li>• Instructors consistently model best practices for high-quality online discussions using grading rubrics to foster growth</li> <li>• Instructors participate in online group discussions using prompts to deepen understanding, sharing personal meaning/relevant experiences, providing alternative perspectives to broaden students' thinking about content.</li> <li>• Using community building strategies initially and throughout the course</li> <li>• Instructor taking time to reinforce and encourage equitable participation (drawing out reluctant or less active participants, tempering more active participants)</li> <li>• Using course announcements in the LMS, emails, text messages, live group chats, course discussion boards, synchronous online office hours</li> </ul>
Direct Instruction	<ul style="list-style-type: none"> <li>• Instructor sharing content knowledge &amp; expertise</li> <li>• Providing exemplars or models to explain expectations for an assignment more clearly.</li> <li>• Managing direction of knowledge to be accurate, include additional reference sources, and scaffold student learning of content</li> <li>• Developing assignments that allowed students to explore and apply course content</li> <li>• Facilitating student reflection</li> <li>• Using various forms of assessments and feedback</li> <li>• Instructor contributing to the social presence (by sharing experiences, making connections, inviting student stories and choices)</li> <li>• Balancing the role of discussion facilitator and content expert</li> <li>• Instructor connecting ideas shared by students to course content when needed and offers personal anecdotes</li> <li>• Provides new and additional resources to foster deeper learning or just-in-time references outside of the predesigned course resources (e.g., textbooks)</li> </ul>



## Findings

As Garrison et al. (2001) defined, teaching presence is the component of the Community of Inquiry model that discusses the behaviors and functions of an online instructor or facilitator. Garrison et al. (2001) presented teaching presence as three constructs: instructional design and organization, facilitating discourse, and direct instruction.

This study invited the entire population of graduate students admitted in the first two program cohorts to participate in this study. The population received two messages inviting their participation during the study. Invitations bounced back as undeliverable from two people; 15 responded (47% response rate). 60% of respondents were female, 40% were male. 73% of respondents worked full-time in education, 20% worked full-time in a business career, and 7% worked part-time.

The researchers felt that the course design based on the COI framework appears successful in enabling the development of teaching presence in the graduate program studied. Graduate students generally regarded teaching presence as high based on the overall results of the Teaching Presence Scale ( $M=4.71$ ,  $SD=0.50$ ). In addition, the results related to the three elements of teaching presences showed no statistically significant difference between the subscales for instructional design and organization, direct instruction, and facilitating discourse. The subscale results related to teaching presence will be discussed next.

### Instructional Design and Organization Subscale Results

Faculty efforts to thoughtfully deploy best practices in instructional design and LMS organization resulted in this subscale of the teaching presence scale being the highest overall subscale ( $M=4.8$ ,  $SD=0.40$ ). This subscale asked about students' level of agreement about four statements related to course format or navigation and clarity of instructions or other communication. As seen in the frequency distributions shown in **Figure 1**, students expressed strong agreement regarding instructors' clear communication of due dates and time frames, course goals, and essential course topics.

In many ways, this facet of teaching presence reaches beyond the LMS design and organization of the course because the organization is dependent on andragogical decisions the instructor makes. Several comments offered by students to open-ended questions offer specific insight into plans and decisions made by instructors related to this aspect

of teaching presence and support the application of andragogy:

*"I appreciated that the assessment of our work was not strictly based on textbook reading. I liked putting what I learned into the projects and collaborating with classmates."*

*"I really liked the optional class meetings. If I had questions, it was a great way to talk to my professor and classmates."*

*"I hope instructors continue to offer optional meetings and 1-on-1 meetings if needed - the flexible availability and timely responses to inquiries were invaluable to career changers still in their professional business roles and juggling responsibilities."*

### Facilitating Discourse Subscale Results

Within the COI framework, facilitating discourse is critical to maintaining learners' interest, motivation and engagement. Therefore, when developing and fostering teaching presence, instructor's participation in the discourse should be stressed. The items of this subscale looked at the instructor's role in regularly reading and commenting on student discussion board postings, constantly supporting the development of the learning community and student development of ideas in pursuit of the learning outcomes. Overall, student responses to these items show that faculty in this study engaged in a satisfactory level of facilitating discourse ( $M = 4.68$ ,  $SD = 0.52$ ). As seen in the frequency distributions shown in **Figure 2**, students endorsed the most substantial agreement regarding instructors' role in guiding discussions. However, more mixed results can be seen regarding the faculty's role in keeping students on task and engaged.

Specific instructor behaviors related to facilitating discussion can be seen in student comments to open-ended questions:

*"Among the strengths of my instructors, I appreciated their role in creating a climate for the questions and answers and promoting fruitful discussions."*

*"Instructors showed their care for us when they addressed the current educational environment, challenges, and issues facing students and future teachers upfront and led discussions around these concerns."*

### Direct Instruction Subscale Results

With direct instruction, instructors serve as an expert and provide intellectual and scholarly leadership in the content area of an online course. To that end, students generally agreed that their instructors engaged in the sharing of salient materials, the delivery of timely feedback, and the encouragement

Figure 1 Instructional Design and Organization Subscale Results

## Design and Organization: Item Results

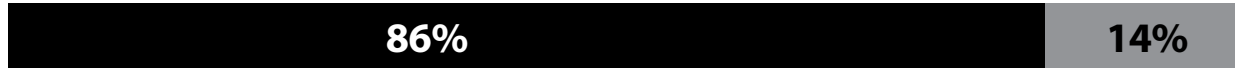
The instructor clearly communicated important due dates/time frames for learning activities.



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



The instructor clearly communicated important course topics.



The instructor clearly communicated important course goals.

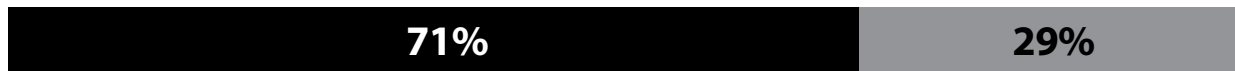


☒ Strongly agree ☒ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Strongly disagree

Figure 2 Facilitating Discourse Subscale Results

## Facilitating Discourse: Item Results

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



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



The instructor helped keep course participants engaged and participating in productive dialogues.



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



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



☒ Strongly agree ☒ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Strongly disagree

of deeper exploration of concepts ( $M = 4.65$ ,  $SD = 0.58$ ). There was a strong endorsement of the instructor's provision of salient resources and materials to support learning and encourage exploring new concepts. However, more mixed results are seen related to the quality and timeliness of feedback provided. **Figure 3** shows the frequency distributions.

Qualitative results support instructor behaviors related to direct instruction that students valued:

*"They took the time to really dive deep into conversations with me and help me down the path to understanding the content. They spoke to me with respect and treated all of us fairly."*

*"My instructors have gone above and beyond to create a class experience of support and community. The practices they espouse are modeled in their daily teaching actions. This adds to my development and educational experience."*

*"I was shown grace in deadlines and given constructive feedback that actually helped me understand the content more."*

## Discussion

Overall, the data examined for this case study suggest that teaching presence was developed. Qualitative comments from learners indicated that instructor presence was beneficial when the students were new to the online learning environment, supporting research that found students need more visible teaching presence of the instructor at the beginning of a course to ease the adjustment process (Cleveland-Innes, Garrison & Kinsel, 2007). Thus, these results suggest that enhanced knowledge of teaching presence may be helpful in order to develop instructors or faculty as online educators of adults. The results of this case study offer practical support for the idea that it is beneficial to educate instructors or faculty on the tenets of teaching presence, so they have a guide for quality online learning interactions grounded in theory.

The literature revealed years of research attempted to identify the characteristics and assessment of quality online programs and courses. Strong opinions are that online programs and courses cannot offer

**Figure 3 Direct Instruction Subscale Results**

### Direct Instruction: Item Results

**The instructor provided useful information from a variety of sources that helped me to learn.**



**The instructor provided feedback in a timely fashion.**



**The instructor provided feedback that helped me understand my strengths and weaknesses relative to the course goals and objectives.**



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



☒ Strongly agree
 ☒ Agree
 ☐ Neither agree nor disagree
 ☐ Disagree
 ☐ Strongly disagree



the same quality education as traditional formats (Hurlbut, 2018; Weldy, 2018). The COI framework utilized in the development of courses within this case study provided alignment to institutional standards and a comprehensive assessment plan to determine program quality. The findings of this case study indicated students expressed strong agreement regarding instructors' clear communication of due dates and time frames, course goals, and course topics. Therefore, it can be concluded that to develop a quality online program and courses, instructional designers and program faculty should implement a framework such as COI to develop a social constructivist learning environment.

The **design and organization** of courses were based on the COI framework. They included using strategies that created deep and meaningful (collaborative-constructivist) learning through the development of teaching presence. The instructor's role begins in the planning phase of course development in the Learning Management System (LMS). It requires building curriculum materials (such as lectures and readings), designing and administering group/individual activities, establishing time parameters/deadlines for activities, providing organizational guidelines and tips about effectively using the technology, and offering optional synchronous class meetings at the beginning of the course to provide an orientation of the LMS. In addition to the LMS components and design, this aspect of teaching presence also requires an instructor to apply principles of andragogy by planning engaging instructional strategies; clearly, aligned course assessment to program learning outcomes; use of a mix of individual, small group, large group instructional activities in synchronous and asynchronous formats; as well as explicit modeling or instruction on teacher to student and student to student interactions. The findings of this case study highlighted how instructional strategies and course design could improve the online learning experience of students.

The researchers operationalized the **facilitating discourse** component of teaching presence to mean the instructor's role in guiding students to knowledge discovery by encouraging participation, keeping students on task, and adding comments and suggestions on the direction and appropriateness of their discussions so that discussion reaches a conclusion or consensus. Fostering teaching presence on this element requires sustained engagement in student discourse and effective developmental feedback to students during discourse. When done well, discourse facilitates student-led engagement with peers that deepens learning. Small-group discussions

were used in many courses in the program. Upon reflection, instructors noted that their presence and engagement in the small group discussions occurred lesser than whole-class discussions. They may have contributed to the mixed results regarding productive and equitable engagement. The faculty researchers noted that when their engagement in facilitating behaviors lagged, students routinely demonstrated a higher level of uncertainty on the discussion's direction, which likely resulted in a stifling of self-discovery, deep learning, and beneficial exchange with fellow learners.

This study supports the idea that an instructor needs to provide **direct instruction**, especially in offering additional supportive resources on a concept and diagnosing student work for accurate understanding and providing timely and detailed feedback to the learner (which requires content expertise). The results also remind instructors of the importance of supporting adult learners in understanding course goals and objectives and supporting students to self-assess their knowledge and skills concerning those outcomes. Participants in this study valued the instructor's immediacy or responsiveness. The value of explanatory feedback was also elevated in these results, especially important in direct instruction providing clarification, explanation, and possible expansion of ideas for students to understand key concepts and their mistakes.

Subjugated or embedded under these three elements of teaching presence is the role communication plays between instructor and student in creating teaching presence in asynchronous online learning. The instructors noted that the range of communication strategies used, the increased frequency, and the timeliness of communication played a central role in developing teaching presence and thus deserve thoughtful planning. This instructor reflection is supported by the nature of the open-ended comments offered by students in the program.

## Limitations

The population size and the response rate are limitations of this study. While high response rates in survey research are ideal, a recent body of research shows that concern over response rates may be overblown (Langer, 2018). Research has shown that low response rates do not always impact the nature of the findings (Groves & Peytcheva, 2008). Still, due to the small population size, the findings of this study cannot be generalized. However, considering the powerful statements made by students in this case study, faculty/instructional designers might

still benefit from applying the COI framework to designing effective online environments for effective teaching and learning.

## Implications for Practice and Future Research

As a result of this study, the researchers confirmed their commitment to guiding online teaching with an evidence-based framework. The main emphasis of the COI framework is to create an effective community that enhances and supports learning. Building a learning community is valuable as it serves social needs and enhances student satisfaction and learning. In addition, teaching presence is an important lever that rests in the control of instructors.

Online instructors that apply teacher presence strategies identified in this study can develop quality online learning environments grounded in best practice research. Online learning environments that maximize instructional design and organization, facilitate discourse, and use direct instruction are better positioned to guide students in using cognitive and social processes to achieve learning outcomes. As more online instructors apply best practices to online course development, there is the potential for a shift in perception that asynchronous online courses can be considered as valuable as traditional learning environments.

Implications for instructors of asynchronous online courses include the ability to analyze their course structure and design through the lens of the COI framework. Online instructors should not seek to replicate face-to-face courses in an online learning environment. The elements in the COI framework are a vetted assessment tool that supports an online learning environment to develop critical thinking, critical inquiry, and discourse among students and teachers. As a result, quality asynchronous online courses can be developed that provide students a learning environment that promotes high order thinking, student interactions, student engagement, and student satisfaction.

This research team's future research might build on this exploratory case study by examining the connection between teaching presence and student engagement (as was studied by Zhang et al., 2016) and may examine differences in teaching presence and student outcomes by examining a larger sample of instructors and their classes. In addition, exploring differences in undergraduate and graduate perceptions of teaching presence might be beneficial. It might highlight differing considerations for fostering teaching

presence, assuming graduate students may be more self-directed, needing andragogy, and undergraduates who are more likely to still be maturing and benefit more from the application of pedagogy.

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