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INSTRUCTOR SOCIAL PRESENCE

Learners' Needs and a Neglected Component of the Community of Inquiry Framework

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S*ocial presence theory* was the term first proposed in 1976 to explain how telecommunications influence how people communicate (Short, Williams, & Christie, 1976). Short and colleagues (1976) defined *social presence* as the degree of salience (i.e., quality or state of being there) between two communicators using a communication medium. This theory became particularly important for online educators trying to understand how people communicated in primarily text-based online courses during the 1990s (Lowenthal, 2009). In fact, social presence was identified as one of the core elements of the Community of Inquiry (CoI) framework, a widely used guide for planning, developing, evaluating, and researching online learning (Boston et al., 2009; Garrison & Arbaugh, 2007; Kumar, Dawson, Black, Cavanaugh, & Sessums, 2011; Kumar & Ritzhaupt, 2014; Swan, Day, Bogle, & Matthews, 2014). The CoI framework is a dynamic process model of online learning based on the theory that effective learning requires a community based on inquiry (Garrison, 2011, 2015). At the heart of the model are the interdependent constructs of cognitive, social, and teaching presence (Swan, Garrison, & Richardson, 2009). Social presence, the first element, is the ability of participants “to project their personal characteristics into the community, thereby presenting themselves to other participants as ‘real people’” (Garrison, Anderson, & Archer, 2000, p. 89). The second element, teaching presence, involves instructional management, building understanding, and direct instruction. And the third element, cognitive presence, is “the extent to which the participants in . . . a community of inquiry are able to construct meaning through sustained communication” (Garrison et al., 2000, p. 89).

As useful as the CoI framework is for the research and practice of online learning, we contend that it fails to acknowledge the unique roles teachers play in all courses but especially in successful online courses. Research has shown us that students' relationships with faculty have a direct and significant effect on their scholarly engagement (Chickering & Gamson, 1987; Kuh, 2002, 2009; Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008). Therefore, it is not surprising to find a high-quality instructor behind every quality online course (Dunlap, 2005; Wilson, Ludwig-Hardman, Thornam, & Dunlap, 2004).

The CoI framework recognizes the importance of teaching presence, but Garrison and his colleagues specifically labeled this element *teaching* presence rather than *teacher* presence because they saw this teaching role as a role that any learner in a CoI could take on (Anderson, Rourke, Garrison, & Archer, 2001). Although this learner-centered mind-set is admirable, it fails to truly appreciate the unique roles that teachers play in online courses—roles that go beyond simply designing instruction, providing direct instruction, and facilitating discussions. Online students care about getting a sense of who their instructors are and that they are “real” people and “there”—namely, their social presence (Dunlap & Lowenthal, 2014). The CoI framework, though, does not clearly articulate or validate this important aspect of communities of inquiry.

Students in online courses continue to report feelings of isolation, disconnection from peers and instructors, impersonal detachment, lack of clarification of instructional goals, and issues with receiving feedback in a timely manner, all of which can result in higher dropout rates and the perception of a less-than-optimal educational experience (Hostetter & Busch, 2006; K. Kim, Liu, & Bonk, 2005; Kruger-Ross & Waters, 2013; Liu, Gomez, & Yen, 2009; Song, Singleton, Hill, & Koh, 2004). An instructor’s social presence, which is dependent on the frequency, type, and quality of interactions between the instructor and the students (Richardson, Koehler, et al., 2015; Swan, 2003; Swan & Shih, 2005), can address these issues and much more. In this chapter, we will describe what instructor social presence is, explain its importance, highlight its role in the CoI framework, summarize research others have conducted on instructor presence, and conclude with implications for practice.

Background

Overview of Social Presence Research

Social presence, as previously mentioned, dates back to the 1970s. Researchers were interested in how the absence of nonverbal and relational cues influences how people communicate. As access to and use of computer conferencing increased during the 1990s, online educators began thinking more and more about how the lack of nonverbal and relational cues in computer-mediated communication influences the social process of teaching and learning. Most of the initial research focused on the conceptualization of social presence and the degree to which it was influenced by a communication medium or a person.

Research has since determined that social presence can be strongly felt by participants (Gunawardena, 1995; Richardson & Swan, 2003; Swan & Shih, 2005; Tu & McIsaac, 2002; Walther, 1996). Research has also shown that social presence can influence students’ learning experiences, including students’ participation and motivation to participate (Jorge, 2010; Mazzolini & Maddison, 2007; Swan & Shih, 2005; Tu & McIsaac, 2002; Weaver & Albion, 2005). Although a majority of studies on social presence have focused on student satisfaction, research has shown that social presence can affect both actual (e.g., course grades, assignment grades) and perceived learning (Hostetter & Busch, 2013; Joksimović, Gašević, Kovanović, Riecke, & Hatala, 2015; Kang & Im, 2013; Picciano, 2002; Richardson & Swan, 2003; Russo & Benson, 2005;

Wise, Chang, Duffy, & del Valle, 2004). Moreover, social presence has also been linked to student retention and intention to reenroll in online course rates (Boston et al., 2009; Liu et al., 2009; Reio & Crim, 2013). In fact, Boston and colleagues (2009) found that two affective expression indicators of social presence—“Online or web-based communication is an excellent medium for social interaction” and “I was able to form distinct impressions of some course participants”—as measured by the CoI survey accounted for more than 20% of the variance in student retention. In addition, students’ perception of social presence has been found to affect overall course satisfaction and satisfaction with the instructor (Akyol & Garrison, 2008; Cobb, 2009; Gunawardena, 1995; Gunawardena & Zittle, 1997; Hostetter & Busch, 2006; Richardson & Swan, 2003; Swan & Shih, 2005). These findings point to the importance of instructors’ social presence in the learning experience.

Overview of Instructor Social Presence

Researchers and online educators have recognized the unique and various roles instructors play in online courses. For instance, online instructors perform pedagogical, social, managerial, and technical functions (Berge, 1995; see Baran, Correia, & Thompson, 2011, for a review of the literature on the roles of online instructors). We posit that many of these roles are rarely addressed by other learners, even in the best CoI. Thus, we believe that instructors have a unique responsibility for the teaching presence (even if students might help contribute to it), as well as their own instructor social presence in the online courses they teach.

Instructor social presence is simply the social presence of the instructor. But because of the unique roles of the instructor (e.g., assigning grades), getting a sense that an instructor is “real” and “there” takes on an increased importance in facilitated online courses. Part of instructor social presence involves instructor immediacy (Hodges & Cowan, 2012; Sheridan & Kelly, 2010). The communication concept of *immediacy* was originally defined by Mehrabian (1969) “as the extent to which communication behaviors enhance closeness to and nonverbal interaction with another” (p. 213), and he found that behaviors used to accomplish this include verbal behaviors and nonverbal behaviors (e.g., smiling, eye contact, body language, humor). Likewise, research has shown that instructor immediacy is important in face-to-face courses (Witt, Wheelless, & Allen, 2004) and online courses (Baker, 2010; Hutchins, 2003), even if it might be accomplished in different ways. However, instructor social presence also involves the concept of *intimacy* (Argyle & Dean, 1965), which in instructional terms can be thought of as supporting and meeting the needs of individual learners. Although an instructor’s social presence, and specifically this type of immediacy and intimacy, depends largely on teacher-to-student interaction, it also depends on the design and development decisions that permeate all aspects of a course, including individual projects or assignments (Hostetter & Busch, 2013; Richardson & Swan, 2003).

Researchers have been investigating instructor social presence for many years; we will summarize some of this research in the next section. However, it is not always clear when a research study is focused more on an instructor’s social presence, an instructor’s teaching presence (sometimes referred to as teacher presence or instructor presence),

or a combination of instructor and student social presence as research dimensions. For example, Lear, Isernhagen, LaCost, and King (2009) conducted a study on instructor presence—based in part on Robyler and Wiencke’s (2004) *Rubric for Assessing Interactive Qualities in Distance Courses* (e.g., elements included social/rapport-building, instructional activity design, technology resources, and instructor engagement)—in which they conceptualized *instructor presence* as including teaching presence and some aspects of social presence (exchanges of personal information among students, class activities designed to increase social rapport among students). Sheridan and Kelly (2010), in contrast, conducted a study in which they acknowledged the differences between teaching presence (based on CoI model dimensions: instructional design, facilitation of discourse, and direct instruction) and teacher presence (personality traits and dispositions) with their construct aligning more with the former. Finally, Ekmekci (2013) conducted research on establishing “instructor presence” but clearly stated in the article that they were investigating teaching presence.

Trends in Instructor Social Presence Research

Once one is able to distinguish among social presence, instructor social presence, and teaching presence, one can find numerous studies examining instructor social presence or studies that at least touch on the concept. Much of this research can be seen as taking one of the three lenses described in this book; that is, social presence as technologically facilitated, social presence as learners’ perception, or social presence as a critical literacy. The following research is simply meant to serve as an overview of the research being done on instructor social presence.

Wise and colleagues (2004) examined teacher social presence (instructor social presence) defined by dimensions of message friendliness, familiarity with the instructor, and instructor friendliness by manipulating the levels of instructor social presence in two groups. They found that social presence did affect learners’ interactions with and perception of the instructor but did not affect students’ perceived learning, satisfaction, or engagement or the quality of their final course product. Similarly, Sheridan and Kelly (2010) examined the aspects of instructor presence that students felt were most important, such as making course requirements clear, being responsive to students’ needs, providing timely information, and offering instructor feedback. They also found that students did not place much importance on synchronous or face-to-face communication or consider being able to “hear” the instructor as very important. Like other research (e.g., Hodges & Cowan, 2012), these studies found that instructor social presence enabled learners to see their instructors as caring, helpful people and that students value instructors who are responsive to their needs. Implications indicate a need to pay particular attention to communication techniques employed by instructors.

Work by Dennen (2005, 2007, 2011) looked not only at communication techniques but also at finding an appropriate balance to allow students to participate fully in the learning process. In one study, Dennen (2005) investigated instructor presence in online discussions. She found that an instructor’s presence influenced student participation in online discussions. Although instructor presence can be established both within and outside of online discussion forums, she found that it was most ideal when an instructor lets

“students know that their messages were being read without taking over the discussion” (p. 142). Dennen suggested that there might even be too much instructor presence at times and that one does not have to frequently contribute to each discussion to have a presence. In a follow-up study, Dennen (2011) investigated the role of instructor presence and identity in online discussions. She found that instructor presence was more than simply clicks; instead, it was more of a qualitative essence that was influenced by an instructor’s orientation to teaching and learning.

Russo and Benson (2005) and Baker (2010) also examined instructor social presence in relation to students’ outcomes. Russo and Benson (2005) investigated the relationship between students’ perceptions of others in an online class (students and instructor) and both affective and cognitive learning outcomes. They found that perceptions of the instructor’s presence were significantly correlated both with affective learning and with student learning satisfaction. In addition, perceptions of instructor presence were strongly related to both attitudes and satisfaction, yet satisfaction with learning was correlated more highly with perceptions of others ($r = .69$) than with perceptions of the instructor ($r = .52$). Baker (2010) investigated instructor immediacy and presence in online courses. Specifically, she was interested in how instructor immediacy (a part of the social presence construct) and instructor presence (teaching presence) related to undergraduate students’ affective learning, perceived cognition, and motivation. Baker found that instructor immediacy was positively related to student affective learning, perceived cognition, and motivation but was not a significant predictor of any of these variables. Yet, instructor presence (teaching presence) was a significant predictor of student affective learning, perceived cognition, and motivation. Ultimately these findings would go to the heart of the CoI framework and the idea that neither learning activities nor interactions alone are enough for a CoI that leads to meaningful learning (Garrison et al., 2000).

Instructor Social Presence in Courses Designed by Others

As the demand for online courses and programs grows, colleges and universities are increasingly using team-based approaches to design “master” online courses that can be taught by any faculty member (see Lowenthal & White, 2009). As a result, a growing number of instructors are finding themselves teaching online courses that they did not design and might have little ability to modify (i.e., they might lack authoring rights to the course). In situations like this, instructor social presence becomes more critical than ever.

Lowenthal (2016) investigated instructor social presence in accelerated online courses which the instructors did not design and in which they did not have authoring access to the courses. In courses like these, the instructors could only share things about themselves—and that they were “real” and “there”—through the course discussions and the grade book. In this mixed-methods exploratory study that focused solely on analyzing online course discussions, Lowenthal found that instructors spent some time establishing their own social presence (e.g., greetings and salutations, inclusive language, empathy) but that they quickly shifted their focus from social presence behaviors to teaching presence behaviors (e.g., dealing with course logistics), most likely because of the lack of time in eight-week accelerated online courses.

In another study, Richardson, Koehler, and colleagues (2015) also examined instructor practice by instructors teaching courses that they did not design. In this study, they

defined *instructor presence* as the specific actions and behaviors taken by the instructor to project himself or herself as a real person socially and pedagogically in an online community. Using a descriptive multiple-case study approach, they examined the instructor presence of 12 instructors in three different courses. The study reported the top 10 techniques used by the instructors for establishing their instructor presence as follows: using names (cohesive), using greetings (cohesive), referencing groups (cohesive), acknowledging work (interactive), clarifying for instructional purposes (direct instruction), providing tips for how to succeed in the course (facilitating discourse), providing general information or just-in-time information about the course (design and organization), offering praise and encouragement (interactive), using unusual punctuation or paralanguage to express nonverbal emotions (affective), and using emphasis to heighten awareness (affective). They also noted that many of these techniques are not overly time-consuming, and there are thereby easy ways for instructors to go about projecting themselves as “real” and “there.”

Measuring Social Presence

One more line of inquiry regarding the work on instructor social presence is related to how it is measured and reported (Lowenthal & Dunlap, 2014; Richardson, Maeda, Caskurlu, & Lv, 2015). Richardson, Maeda, and colleagues (2015) conducted a meta-analysis of social presence in relation to student perceived learning and satisfaction in online learning. Among other things, they found that the results showed a strong positive relationship between social presence and satisfaction ($r = .56$, $SD = 0.02$). The magnitude of the relationship was moderated by the course length (in weeks), discipline area, and scale used to measure social presence. Investigating various scales used to measure social presence, one finds that although two scales may purport to measure the same construct, the dimensions may vary (e.g., intimacy, immediacy, co-presence, influence, cohesiveness, open communication, group cohesion, affective expressions, instructional communication) and capture a different element of the social presence construct based on the set of items (operationalization) included in the scale; this could result in differing outcomes. For example, the Richardson and Swan (2003) scale incorporates items that speak to the general sense of community (“The instructor created a feeling of an online community”) as well as includes an item for instructor-related social presence (“The instructor facilitated discussions in the course”). In contrast, although the CoI survey (Swan et al., 2008) includes similarly worded items (“The instructor’s actions reinforced the development of a sense of community among course participants” and “The instructor helped to focus discussion on relevant issues in a way that helped me to learn”), these scales factored into the teaching presence subscale and were therefore not included in the analysis (Richardson & Swan, 2003; Swan et al., 2008).

Implications for Practice

Theory, research, and practice all illustrate the importance of instructor social presence in online courses. However, there is a fine line between being “there” (which some like to think of as being “present”) and being an overly controlling instructor or being a completely absent instructor. Research has suggested that an instructor does not have to

be online constantly (Dennen, 2005, 2011; Dunlap, 2005) to establish instructor social presence; however, at the same time, an instructor's social presence is still influenced by the frequency, type, and quality of interactions between the instructor and the students (Richardson, Koehler, et al., 2015; Shea, Hayes, Vickers, Gozza-Cohen, et al., 2010; Swan, 2002; Swan & Shih, 2005). The following are a few strategies based on themes in the literature that online educators can use to establish and maintain instructor social presence in online courses.

Instructor Persona

One of the first steps to establishing instructor social presence in online courses is finding ways to establish one's personality—or what Dennen (2007) termed *persona*. One's personality includes those things that make one unique—that is, things that make one appear “real.” Students want to get a sense of who their instructor is as a person. This is more about being authentic and “real” than fitting some stereotype of what a teacher is or is not. The following are some things online instructors can do:

- Add a detailed biography to the learning management system, including as much personal but relevant information as they are comfortable sharing (Dunlap & Lowenthal, 2014)
- Post a recent picture of themselves (Aragon, 2003; Rourke, Anderson, Garrison, & Archer, 1999)
- Share their teaching philosophy (Dunlap & Lowenthal, 2014)
- Share scholarship or creative works (Lowenthal & Dunlap, 2012)
- Create welcome and orientation announcements (Dunlap & Lowenthal, 2010; Garrett Dikkers, Whiteside, & Lewis, 2012; Shea, Hayes, & Vickers, 2010)
- Provide personal feedback that reveals their personality and knowledge of the students (Borup, West, & Thomas, 2015; Cox, Black, Heney, & Keith, 2015; Ice, Curtis, Phillips, & Wells, 2007; Richardson & Swan, 2003; Shea, Hayes, & Vickers, 2010; Whiteside, Garrett Dikkers, & Lewis, 2014).

Course Design

Instructor social presence begins at the course design phase of an online course. Online courses reflect the design decisions of those designing the courses. Therefore, it is important, whenever possible, to design courses that reflect not only your personality but also, most importantly, your own instructional values (Dunlap & Lowenthal, 2013). The following are a few ways that course design decisions can and should reflect instructors' social presence:

- Intentionally design opportunities for teacher-to-student interaction (e.g., a five-minute phone call) (see Dunlap & Lowenthal, 2010)
- Create assignments or projects that reflect teachers' passion for their subject matter

- Clearly set expectations and how instructors see their role in class discussions (as Dennen, 2005, found, there is not one right way to facilitate discussions) (Shea, Hayes, & Vickers, 2010)
- Add humor when appropriate (e.g., post content-related comic strips) (see Gunawardena & Zittle, 1997; Rourke et al., 1999; Sung & Mayer, 2012; Wise et al., 2004)

Online Communication

Communicating with students during a course is still the number one way that instructors establish their instructor social presence. Instructors communicate—whether one-to-one or one-to-many—with students in a variety of ways; for instance, they post announcements, send e-mails, take part in asynchronous and synchronous discussions, and provide feedback and assessment. Each of these types of communication provides instructors with an opportunity to establish their instructor social presence. The following are some strategies online educators can use to establish and maintain instructor social presence:

- Regularly communicate with the class in a consistent, predictable, and public manner, whether in the discussion forums, class e-mails, or announcements (Arbaugh & Hwang, 2006; Lowenthal & Thomas, 2010)
- Occasionally send individual e-mails or messages to students (Dunlap & Lowenthal, 2010)
- Provide timely and detailed feedback (Borup et al., 2015; Cox et al., 2015; Dunlap & Lowenthal, 2014; Ice et al., 2007)
- Have students post assignments in discussion forums rather than in digital drop boxes (Lowenthal & Thomas, 2010)
- Self-disclose and share personal stories (Lowenthal & Thomas, 2010)
- Address students by name (Rourke et al., 1999)

Conclusion

The CoI framework posits that effective learning requires a community of teachers and students focused on inquiry (Garrison, 2011, 2015). Garrison and his colleagues recognized the importance of both teaching presence and social presence in communities based on inquiry but failed to highlight the unique role teachers play in online courses. Researchers have since argued that the social presence of the instructor, or what we are calling *instructor social presence*, is an important component in CoIs (Pollard, Minor, & Swanson, 2014). In this chapter, we described what instructor social presence is, explained its importance, highlighted its role in the CoI framework, summarized research conducted on instructor social presence, and concluded with implications for practice.

Chapter Review

- The CoI recognizes the importance of teaching presence, which is often referred to as teacher presence, yet teaching presence indicates any learner in a CoI could take on the role. This chapter specifically looks at instructor social presence, which could be considered teacher presence.
- Instructor social presence is especially important to consider when the instructor is not the course designer.
- It is important for instructors to develop their online persona, a way to make them feel “real” and authentic to students.
- The designer of online courses needs to consider how he or she and others teaching a course will be able to leverage design features such as built-in interactions and avenues for communication.

References

- Akyol, Z., & Garrison, D. R. (2008). The development of a Community of Inquiry over time in an online course: Understanding the progression and integration of social, cognitive and teaching presence. *Journal of Asynchronous Learning Networks*, 12(2–3), 3–22.
- Anderson, T., Rourke, L., Garrison, D. R., & Archer, W. (2001). Assessing teaching presence in a computer conference context. *Journal of Asynchronous Learning Networks*, 5(2), 1–17.
- Aragon, S. (2003). Creating social presence in online environments. *New Directions for Adult and Continuing Education*, 100, 57–68.
- Arbaugh, J. B., & Hwang, A. (2006). Does “teaching presence” exist in online MBA courses? *The Internet and Higher Education*, 9(1), 9–21.
- Argyle, M., & Dean, J. (1965). Eye contact, distance and affiliation. *Sociometry*, 28(3), 289–304.
- Baker, C. (2010). The impact of instructor immediacy and presence for online student affective learning, cognition, and motivation. *Journal of Educators Online*, 7(1), 1–30.
- Baran, E., Correia, A. P., & Thompson, A. (2011). Transforming online teaching practice: Critical analysis of the literature on the roles and competencies of online teachers. *Distance Education*, 32(3), 421–439.
- Berge, Z. L. (1995). Facilitating computer conferencing: Recommendations from the field. *Educational Technology*, 15(1), 22–30.
- Borup, J., West, R. E., & Thomas, R. (2015). The impact of text versus video communication on instructor feedback in blended courses. *Educational Technology Research and Development*, 63(2), 161–184.
- Boston, W., Díaz, S. R., Gibson, A. M., Ice, P., Richardson, J., & Swan, K. (2009). An exploration of the relationship between indicators of the Community of Inquiry framework and retention in online programs. *Journal of Asynchronous Learning Networks*, 13(3), 67–83.
- Chickering, A. W., & Gamson, Z. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 40(7), 3–7.
- Cobb, S. C. (2009). Social presence and online learning: A current view from a research perspective. *Journal of Interactive Online Learning*, 8(3), 241–254.
- Cox, S., Black, J., Heney, J., & Keith, M. (2015). Promoting teacher presence: Strategies for effective and efficient feedback to student writing online. *Teaching English in the Two-Year College*, 42(4), 376.

- Dennen, V. P. (2005). From message posting to learning dialogues: Factors affecting learner participation in asynchronous discussion. *Distance Education*, 26(1), 127–148.
- Dennen, V. P. (2007). Presence and positioning as components of online instructor persona. *Journal of Research on Technology in Education*, 40(1), 95–108.
- Dennen, V. P. (2011). Facilitator presence and identity in online discourse: Use of positioning theory as an analytic framework. *Instructional Science*, 39(4), 527–541.
- Dunlap, J. C. (2005). Workload reduction in online courses: Getting some shuteye. *Performance Improvement*, 44(5), 18–25.
- Dunlap, J. C., & Lowenthal, P. R. (2010). Defeating the Kobayashi Maru: Supporting student retention by balancing the needs of the many and the one. *EDUCAUSE Quarterly*, 33(4). Retrieved from <http://er.educause.edu/articles/2010/12/defeating-the-kobayashi-maru-supporting-student-retention-by-balancing-the-needs-of-the-many-and-the-one>
- Dunlap, J. C., & Lowenthal, P. R. (2013). What was your best learning experience? Our story about using stories to solve instructional problems. *International Journal of Teaching and Learning in Higher Education*, 25(2), 269–274. Retrieved from <http://www.isetl.org/ijtlhe/pdf/IJTLHE1563.pdf>
- Dunlap, J. C., & Lowenthal, P. R. (2014). The power of presence: Our quest for the right mix of social presence in online courses. In A. A. Piña & A. P. Mizell (Eds.), *Real life distance education: Case studies in practice* (pp. 41–66). Greenwich, CT: Information Age Publishing.
- Ekmekci, O. (2013). Being there: Establishing instructor presence in an online learning environment. *Higher Education Studies*, 3(1), 29–38. doi:10.5539/hes.v3n1p29
- Garrett Dikkers, A., Whiteside, A. L., & Lewis, S. (2012). Get present: Build community and connectedness online. *Learning and Leading With Technology*, 40(2), 22–25.
- Garrison, D. R. (2011). *E-learning in the 21st century: A framework for research and practice*. New York, NY: Routledge.
- Garrison, D. R. (2015). *Thinking collaboratively: Learning in a community of inquiry*. New York, NY: Routledge.
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2–3), 87–105.
- Garrison, D. R., & Arbaugh, J. B. (2007). Researching the Community of Inquiry framework: Review, issues, and future directions. *The Internet and Higher Education*, 10(3), 157–172.
- Gunawardena, C. N. (1995). Social presence theory and implications for interaction and collaborative learning in computer conferences. *International Journal of Educational Telecommunications*, 1(2–3), 147–166.
- Gunawardena, C. N., & Zittle, F. J. (1997). Social presence as a predictor of satisfaction within a computer-mediated conferencing environment. *The American Journal of Distance Education*, 11(3), 8–26.
- Hodges, C. B., & Cowan, S. F. (2012). Preservice teachers' views of instructor presence in online courses. *Journal of Digital Learning in Teacher Education*, 28(4), 139–145.
- Hostetter, C., & Busch, M. (2006). Measuring up online: The relationship between social presence and student learning satisfaction. *Journal of Scholarship of Teaching and Learning*, 6(2), 1–12.
- Hostetter, C., & Busch, M. (2013). Community matters: Social presence and learning outcomes. *Journal of the Scholarship of Teaching and Learning*, 13(1), 77–86.
- Hutchins, H. M. (2003). Instructional immediacy and the seven principles: Strategies for facilitating online courses. *Online Journal of Distance Learning Administration*, 6(3). Retrieved from <http://www.westga.edu/~distance/ojdl/fall63/hutchins63.html>

- Ice, P., Curtis, R., Phillips, P., & Wells, J. (2007). Using asynchronous audio feedback to enhance teaching presence and student sense of community. *Journal of Asynchronous Learning Networks*, 11(2), 3–25.
- Joksimović, S., Gašević, D., Kovanović, V., Riecke, B. E., & Hatala, M. (2015). Social presence in online discussions as a process predictor of academic performance. *Journal of Computer Assisted Learning*, 31(6), 638–654. doi:10.1111/jcal.12107
- Jorge, I. (2010). Social presence and cognitive presence in an online training program for teachers of Portuguese: Relation and methodological issues. Proceedings from *IODL and ICEM 2010 Joint Conference and Media Days* (pp. 427–435). Retrieved from <http://hdl.handle.net/10451/8674>
- Kang, M., & Im, T. (2013). Factors of learner–instructor interaction which predict perceived learning outcomes in online learning environment. *Journal of Computer Assisted Learning*, 29, 292–301. doi:10.1111/jcal.12005
- Kim, K., Liu, S., & Bonk, C. J. (2005). Online MBA students' perceptions of online learning: Benefits, challenges, and suggestions. *The Internet and Higher Education*, 8(4), 335–344.
- Kruger-Ross, M. J., & Waters, R. D. (2013). Predicting online learning success: Applying the situational theory of publics to the virtual classroom. *Computers and Education*, 61, 176–184.
- Kuh, G. D. (2002). *The National Survey of Student Engagement: Conceptual framework and overview of psychometric properties*. Center for Postsecondary Research, Indiana University, Bloomington. Retrieved from http://nsse.iub.edu/pdf/Psychometric_framework_2002.pdf
- Kuh, G. D. (2009). What student affairs professionals need to know about student engagement. *Journal of College Student Development*, 50, 683–706.
- Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *Journal of Higher Education*, 79, 540–563.
- Kumar, S., Dawson, K., Black, E. W., Cavanaugh, C., & Sessums, C. D. (2011). Applying the Community of Inquiry framework to an online professional practice doctoral program. *The International Review of Research in Open and Distributed Learning*, 12(6), 126–142.
- Kumar, S., & Ritzhaupt, A. D. (2014). Adapting the Community of Inquiry survey for an online graduate program: Implications for online programs. *E-Learning and Digital Media*, 11(1), 59–71.
- Lear, J. L., Isernhagen, J. C., LaCost, B. A., & King, J. W. (2009). Instructor presence for web-based classes. *Delta Pi Epsilon Journal*, 51(2), 86–98.
- Liu, S. Y., Gomez, J., & Yen, C.-J. (2009). Community college online course retention and final grade: Predictability of social presence. *Journal of Interactive Online Learning*, 8, 165–182.
- Lowenthal, P. R. (2009). The evolution and influence of social presence theory on online learning. In T. T. Kidd (Ed.), *Online education and adult learning: New frontiers for teaching practices* (pp. 124–139). Hershey, PA: IGI Global.
- Lowenthal, P. R. (2016). A mixed methods examination of instructor social presence in accelerated online courses. In L. Kyei-Blankson, J. Blankson, E. Ntuli, & C. Agyeman (Eds.), *Handbook of research on strategic management of interaction, presence, and participation in online courses* (pp. 147–159). Hershey, PA: IGI Global.
- Lowenthal, P. R., & Dunlap, J. C. (2012). Intentional web presence: 10 SEO strategies every academic needs to know. *EDUCAUSE Review Online*. Retrieved from <http://er.educause.edu/articles/2012/6/intentional-web-presence-10-seo-strategies-every-academic-needs-to-know>
- Lowenthal, P. R., & Dunlap, J. C. (2014). Problems measuring social presence in a Community of Inquiry. *E-Learning and Digital Media*, 11(1), 19–30.

- Lowenthal, P. R., & Thomas, D. (2010). Death to the digital dropbox: Rethinking student privacy and public performance. *EDUCAUSE Quarterly*, 33(3). Retrieved from <http://er.educause.edu/articles/2010/9/death-to-the-digital-dropbox-rethinking-student-privacy-and-public-performance>
- Lowenthal, P. R., & White, J. W. (2009). Enterprise model. In P. Rogers, G. Berg, J. Boettcher, C. Howard, L. Justice, & K. Schenk (Eds.), *Encyclopedia of distance and online learning* (2nd ed., pp. 932–936). Hershey, PA: IGI Global.
- Mazzolini, M., & Maddison, S. (2007). When to jump in: The role of the instructor in online discussion forums. *Computers and Education*, 49, 193–213. doi:10.1016/j.compedu.2005.06.011
- Mehrabian, A. (1969). Some referents and measures of nonverbal behavior. *Behavioral Research Methods and Instrumentation*, 1, 213–217.
- Picciano, A. G. (2002). Beyond student perceptions: Issues of interaction, presence, and performance in an online course. *Journal of Asynchronous Learning Networks*, 6(1), 21–40.
- Pollard, H., Minor, M., & Swanson, A. (2014). Instructor social presence within the Community of Inquiry framework and its impact on classroom community and the learning environment. *Online Journal of Distance Learning Administration*, 17(2). Retrieved from http://www.westga.edu/~distance/ojdl/summer172/Pollard_Minor_Swanson172.html
- Reio, T. G., & Crim, S. J. (2013). Social presence and student satisfaction as predictors of online enrollment intent. *American Journal of Distance Education*, 27(2), 122–133. doi:10.1080/08923647.2013.775801
- Richardson, J. C., Koehler, A. A., Besser, E. D., Caskurlu, S., Lim, J., & Mueller, C. M. (2015). Conceptualizing and investigating instructor presence in online learning environments. *The International Review of Research in Open and Distributed Learning*, 16(3), 256–297.
- Richardson, J. C., Maeda, Y., Caskurlu, S., & Lv, J. (2015, November). *The relationship between social presence in online learning and student's satisfaction and learning: A meta-analysis*. Paper presented at the conference of the Association for Educational Communications and Technology, Indianapolis, IN.
- Richardson, J. C., & Swan, K. (2003). Examining social presence in online courses in relation to students' perceived learning and satisfaction. *Journal of Asynchronous Learning Networks*, 7(1), 68–88.
- Roblyer, M. D., & Wiencke, W. R. (2004). Exploring the interaction equation: Validating a rubric to assess and encourage interaction in distance courses. *Journal of Asynchronous Learning Networks*, 8(4). Retrieved from http://www.sloan-c.org/publications/jaln/v8n4/v8n4_roblyer.asp
- Rourke, L., Anderson, T., Garrison, D. R., & Archer, W. (1999). Assessing social presence in asynchronous text-based computer conferencing. *International Journal of E-Learning and Distance Education*, 14(2), 50–71. Retrieved from <http://www.ijede.ca/index.php/jde/issue/view/27>
- Russo, T., & Benson, S. (2005). Learning with invisible others: Perceptions of online presence and their relationship to cognitive and affective learning. *Educational Technology and Society*, 8(1), 54–62.
- Shea, P., Hayes, S., & Vickers, J. (2010). Online instructional effort measured through the lens of teaching presence in the Community of Inquiry framework: A re-examination of measures and approach. *The International Review of Research in Open and Distributed Learning*, 11(3), 127–154.
- Shea, P., Hayes, S., Vickers, J., Gozza-Cohen, M., Uzuner, S., Mehta, R., Valchova, A., & Rangan, P. (2010). A re-examination of the Community of Inquiry framework: Social network and content analysis. *The Internet and Higher Education*, 13(1), 10–21.

- Sheridan, K., & Kelly, M. A. (2010). The indicators of instructor presence that are important to students in online courses. *Journal of Online Learning and Teaching*, 6(4), 767–779.
- Short, J., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications*. London, UK: John Wiley & Sons.
- Song, L., Singleton, E. S., Hill, J. R., & Koh, M. H. (2004). Improving online learning: Student perceptions of useful and challenging characteristics. *The Internet and Higher Education*, 7(1), 59–70.
- Sung, E., & Mayer, R. E. (2012). Five facets of social presence in online distance education. *Computers in Human Behavior*, 28(5), 1738–1747.
- Swan, K. (2002). Building learning communities in online courses: The importance of interaction. *Education, Communication, and Information*, 2(1), 23–49.
- Swan, K. (2003). Developing social presence in online course discussions. In S. Naidu (Ed.), *Learning and teaching with technology: Principles and practices* (pp. 147–164). London, UK: Kogan Page.
- Swan, K., Day, S. L., Bogle, L. R., & Matthews, D. B. (2014). A collaborative, design-based approach to improving an online program. *The Internet and Higher Education*, 21, 74–81.
- Swan, K., Garrison, D. R., & Richardson, J. C. (2009). A constructivist approach to online learning: The Community of Inquiry framework. In C. R. Payne (Ed.), *Information technology and constructivism in higher education: Progressive learning frameworks* (pp. 43–57). Hershey, PA: IGI Global.
- Swan, K., Shea, P., Richardson, J., Ice, P., Garrison, D. R., Cleveland-Innes, M., & Arbaugh, J. B. (2008). Validating a measurement tool of presence in online communities of inquiry. *E-mentor*, 2(24), 1–12.
- Swan, K., & Shih, L. F. (2005). On the nature and development of social presence in online course discussions. *Journal of Asynchronous Learning Networks*, 9(3), 115–136.
- Tu, C.-H., & McIsaac, M. (2002). The relationship of social presence and interaction in online classes. *The American Journal of Distance Education*, 16, 131–150. doi:10.1207/S15389286AJDE1603_2
- Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal, and hyperpersonal interaction. *Communication Research*, 23, 3–43. doi:10.1177/009365096023001001
- Weaver, C. M., & Albion, P. (2005). Momentum in online discussions: The effect of social presence on motivation for participation. In *Proceedings of the 22nd annual conference of the Australasian Society for Computers in Learning in Tertiary Education: Balance, fidelity, mobility-maintaining the momentum? ASCILITE 2005* (pp. 703–706). Brisbane, Australia: Queensland University of Technology, Teaching and Learning Support Services.
- Whiteside, A. L., Garrett Dikkers, A., & Lewis, S. (2014). The power of social presence for learning. *EDUCAUSE Review Online*. Retrieved from <http://er.educause.edu/articles/2014/5/the-power-of-social-presence-for-learning>
- Wilson, B. G., Ludwig-Hardman, S., Thornam, C. L., & Dunlap, J. (2004). Bounded community: Designing and facilitating learning communities in formal courses. *The International Review of Research in Open and Distance Learning*, 5(3).
- Wise, A., Chang, J., Duffy, T., & del Valle, R. (2004). The effects of teacher social presence on student satisfaction, engagement, and learning. *Journal of Educational Computing Research*, 31(3), 247–271.
- Witt, P. L., Wheelless, L. R., & Allen, M. (2004). A meta-analytical review of the relationship between teacher immediacy and student learning. *Communication Monographs*, 71(2), 184–207.