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Recent literature has shown that social presence is one of the most significant factors in improving instructional effectiveness and building a sense of community. This chapter examines strategies for creating social presence within online environments.

Creating Social Presence in Online Environments

Steven R. Aragon

During the last decade, the Internet has significantly changed the way learning is delivered and facilitated in both educational and noneducational settings. Advocates of Internet-based instruction are largely positive and optimistic about its potential. But before it can be fully accepted by the mainstream public and educational community, many challenges must be addressed. Primary among these challenges is how to meet "the expectations and needs of both the instructor and the student and how to design online courses so they provide a satisfying and effective learning environment" (Johnson, Aragon, Shaik, and Palma-Rivas, 2000, p. 31).

According to Bibeau (2001), teaching and learning functions are inherently social endeavors; therefore, it is beneficial to understand the various effects of the geographic, temporal, and psychological distance between instructors and participants. The lens through which these distances are examined is that of social presence theory. This chapter examines definitions of social presence, the benefits of social presence on learning, and strategies for increasing social presence within online environments.

Prior to proceeding into the discussion of social presence, it is important to acknowledge the fact that recent thinking views social presence as one variable among many that contributes to building a sense of community among learners at a distance. Rovai (2001) presents a model of community that, in addition to social presence, suggests that student-instructor ratio, transactional distance, instructor immediacy, lurking, social equality, collaborative learning, group facilitation, and self-directed learning all have an impact on the sense of community within online environments. In a subsequent paper, Rovai (2002) modifies this framework by proposing trans-

actional distance, social presence, social quality, small-group activities, group facilitation, teaching style and learning stage, and community size as positive correlates to a sense of community.

It is important to acknowledge the recent thinking connected to social presence in order to illustrate the context in which it fits and to avoid leaving the impression with the reader that social presence is the only ingredient by which successful online environments thrive. However, social presence has been made the sole focus of this chapter because I believe it is one of the first components that must be established in order to initiate learning in an online environment.

The Internet and Social Isolation

Before presenting the literature-based definition of social presence, take a few moments and place yourself in the following scenario—one many of us have experienced at one time or another. The context and actors may have been different, but the experience and feelings are the same. This scenario helps to illustrate what social presence is and the role it plays in helping us become engaged in situations involving the interaction with others.

Think about the last time you attended a professional development conference that you had never attended before, or the first day on a new job, in a new class, or in a training session sponsored by your place of work or an outside training organization; or perhaps you traveled to a new country. Think about all the new faces that surrounded you. Think about not knowing the ground rules or the accepted protocol of the particular context. Think about not knowing the "language" of the group, whether this was literally or figuratively true. Although you might have felt excited, you were probably anxious and uneasy as well, based on the situation being new. You might have also experienced feelings of loneliness or depression.

Now think about the various ways you went about easing your level of anxiety. Did you initiate a conversation with someone, or did someone initiate a conversation with you? Did you take some time just to "hang out" and observe? Did you look for people who were dressed in a similar way as you or appeared to be similar to you in terms of job position, education level, or socioeconomic status? What types of questions did you ask and of whom? Did you try to find people you already knew, or was there possibly some type of buddy system present in which you were assigned to someone who would show you the ropes? Regardless of your approach, I'm guessing that within a fairly short period of time, you became comfortable in this new social environment, and your comfort level continued to increase over time as a result of continued positive social interaction.

Finally, think about how you would have felt had you not connected socially with others in your new situation and context. Would it have been enjoyable? Would it have been one of the most miserable or boring experi-

ences of your life? Would you have found some way to remove yourself from this situation and get back to your "real world?"

When we connect with others in new social situations, we create social presence or a degree of interpersonal contact (Gunawardena and Zittle, 1997). The challenge in online learning environments is facilitating this degree of interpersonal contact with the instructor and other participants. When individuals participating in online learning events are separated by physical or geographic location and sometimes are working in isolated conditions, the ability to establish interpersonal contact with others greatly diminishes because all contact is electronic.

Go back to the initial scenario I described and think about this as being the normal conditions under which online participants attempt to learn. What impact would these conditions have on their ability to learn and on their desire to maintain participation? How can social presence help avoid the negative outcomes that are likely to be illustrated through a response to this question?

Before talking about the benefits of social presence and how it is established, working definitions are needed. The section to follow includes a discussion of the ways in which social presence has been defined in the literature.

Definition of Social Presence

Although the roots of social presence can be traced back to Mehrabian's concept of immediacy (as reported in Rourke, Anderson, Garrison, and Archer, 1999), much of today's application of the construct is found within the communications literature. In studying face-to-face, audio, and closed-circuit television encounters, Short, Williams, and Christie (1976) define social presence as the "degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships" (p. 65). As Gunawardena and Zittle (1997) suggest, intimacy and immediacy are two concepts associated with social presence in which intimacy is dependent on nonverbal factors, including physical distance, eye contact, and smiling. Immediacy is a "measure of the psychological distance that a communicator puts between himself or herself and the object of his/her communication" (Gunawardena and Zittle, 1997, p. 9). The researchers continue by postulating that immediacy or nonimmediacy can be conveyed nonverbally (that is, physical proximity, formality of dress, and facial expression) as well as verbally.

Kearney, Plax, and Wendt-Wasco (1985), Gorham (1988), and Christophel (1990) provide some of the early descriptions of the concept of social presence from an instructional communication perspective, defining it as "teacher immediacy" in the classroom. Behaviors that create immediacy include both verbal and nonverbal actions such as gesturing, smiling, using humor and vocal variety, personalizing examples, addressing students

by name, questioning, praising, initiating discussion, encouraging feedback, and avoiding tense body positions (Hackman and Walker, 1990). Rourke, Anderson, Garrison, and Archer (1999) place more responsibility on the learners when they describe social presence as the ability of the learners to socially and affectively project themselves in communities of inquiry.

Others have offered the following interpretations of the concept: "the feeling that others are involved in the communication process" (Whiteman, 2002, p. 6); "the degree to which a person feels 'socially present'" (Leh, 2001, p. 110); "the degree of person-to-person awareness" (Tu, 2000, p. 1662); "the sense of being present in a social encounter with another person" (McLellan, 1999, p. 40), and "the degree to which participants are able to project themselves affectively within the medium" (Garrison, 1997, p. 6). However, Gunawardena and Zittle (1997) put it most simply when they say that social presence is "the degree to which a person is perceived as a 'real person' in mediated communication" (p. 9).

Benefits of Social Presence

The overall goal for creating social presence in any learning environment, whether it be online or face-to-face, is to create a level of comfort in which people feel at ease around the instructor and the other participants. Without this goal being achieved, the learning environment can turn to one that is not fulfilling or successful for the instructors and the learners. As Whiteman (2002) states, "People feel more comfortable around us when they believe we share a kinship and common values" (p. 8). When the environment is lacking social presence, the participants see it as impersonal and, in turn, the amount of information shared with others decreases (Leh, 2001).

As Yoon (2003) found, social behaviors accounted for 26.3 percent of the total performed behaviors by virtual learning teams. He identified these as greetings, sharing of personal life, sharing of work and professional interests, discussing the course, pairing and member support, and sharing humor. Sharing of personal life, discussing the course, and sharing of work and professional interests decreased over time, while sharing humor and pairing and member support increased over time. Yoon (2003) posits that virtual team members try early on to enhance the social presence within an online environment, and those relationships between group members gradually change from formal to informal over time. In addition, they illustrate the importance of social interaction with others within online environments.

Raising social presence in online environments may help to create impressions of quality related to the experience on the part of the student (Newberry, 2001). Social presence in learning leads to inclusion (the need to establish identity with others), control (the need to exercise leadership and prove one's abilities, and affection (the need to develop relationships with people (Whiteman, 2002). High levels of social presence create a learning environment that is perceived as warm, collegial, and approachable for

all involved (Rourke and others, 1999). An additional benefit of social presence, according to Rourke and others (1999), is its ability to instigate, sustain, and support cognitive and affective learning objectives by making group interactions appealing, engaging, and intrinsically rewarding.

Gunawardena and her colleagues have produced probably the most extensive body of empirical research related to social presence and its influence in online environments. Two key studies are applicable to this discussion. In a 1997 study, Gunawardena and Zittle examined the influence of social presence as a predictor of satisfaction within computer-mediated conferencing (CMC) environments. Defining satisfaction as the value of the CMC in facilitating learning for the students, they found social presence to be a strong predictor of satisfaction in online environments. In a more recent study, Gunawardena, Nolla, and others (2001) posit that social presence facilitates the building of trust and self-disclosure within an online learning context.

As reported by Shin (2002), much of the research to date has looked at the relationship between the varying extent of social presence and the level of student satisfaction (the two primary pieces are reported in this section). In addition, other studies have examined the varying extent of social presence and the level of student learning achievement (see Shin, 2002, for this review). Although these studies hypothesize that the level of perceived social presence will produce positive effects on student learning, only research by Hackman and Walker (1990) reports a positive relationship between social presence and degree of perceived learning outcome as well as satisfaction.

Although the benefits of social presence can be seen more extensively in the area of student satisfaction, a body of literature is beginning to grow that suggests an influence on learning outcomes as well. Therefore, it is important for course designers, instructors, and participants to know how to create this social connection within learning environments. Of particular importance is to know how to create this connection in online environments due to the isolated nature of these instructional settings. The remainder of this chapter is devoted to offering strategies for creating social presence in online environments.

Strategies for Creating Social Presence

This section examines strategies that will help establish and maintain social presence within online environments. In this section, I offer strategies for the three groups of individuals involved with the three functions of these environments: (1) course designers (course design), (2) instructors (delivery and management), and (3) participants (participation). In reviewing the literature, the main responsibility for creating social presence is placed on the instructors. However, based on my personal experience as an online course designer and online course participant, I contend that the responsi-

bility for establishing and maintaining social presence extends beyond the role of the instructor.

Course Design. Social presence should be initiated in the actual design of an online course. This section takes a look at different course design strategies that can facilitate the establishment of social presence.

Develop Welcome Messages. All online courses should include some type of welcome message from the instructor. In the courses in the online curriculum that I teach, this is actually a thirty-second streamed video in which the instructor welcomes the students, introduces himself or herself, and provides a brief overview of the course. For those without the technology to create a video, an alternative is a written welcome statement from the instructor with his or her picture included. The goal is to allow the students some opportunity to know who the instructor is prior to the start of the class and to put a face to a name.

Include Student Profiles. A second design strategy that we incorporate is to include student profiles in one of the earlier pages of the course Web site. The student profile includes a picture of the student, e-mail address(es), instant messenger ID, and a bio of approximately one page. The bio includes the student's current position, prior experience, interests associated with the field of study, and any other personal information they choose to share with the class, including hobbies and family. Because no Web site is fully secure, this is an option; students are not required to submit a picture or a bio; many just submit a bio with no picture. Any information, whether visual or written, helps both the instructor and the other members of the class build a social connection with each other. As Newberry (2001) points out, the inclusion of pictures is a low-cost option for raising social presence.

Incorporate Audio. The technology that exists today allows a close replication of a face-to-face environment at a reasonable cost to both the organization and the participants. Therefore, it is recommended that the online environment incorporate some form of audio into the design. This can be oneway audio in which the instructor broadcasts to the students or it can be two-way audio in which both instructor and students broadcast back and forth. The latter scenario does require the participant to have advanced technology, which can be costly. Because of this, my program only uses one-way audio.

Audio helps to create social presence by reflecting the emotions of the instructor to the students. It can also help establish the formality of the environment and the friendliness of the instructor and can encourage participation (McLellan, 1999). In environments in which the conversation is text-based only, there is a potential risk of someone interpreting meanings of words and statements incorrectly. This is very easy to do when the instructor is trying to type fast or accidentally has the "caps lock" function on. The use of audio helps students be at ease with the instructor.

When two-way audio is not an option, developers should examine other options for placing students' voices in the online environment (Newberry, 2001). In my department's online program, we provide a toll-free number that allows students to call in and speak with the instructor and to be broadcast to the remaining class. This gives the students an option of responding either in text form or verbally and helps them establish presence with the other members of the class as well as the instructor.

Limit Class Size. The size of the class significantly influences the establishment of social presence. Rovai (2001) suggests a student-instructor ratio of no higher than 30:1. Beyond this, the amount of social presence that can be established between students and the instructor diminishes. Class sizes in the program I teach in range from twenty to thirty students; the number is often based on the kinds of studies that make up the curriculum. A more project-portfolio-oriented curriculum may not permit as many students due to the time it takes to provide feedback on work; one that has less project-portfolio work can handle more students. With attrition rates taken into account, our course sizes usually level to around twenty-five students, which appears to be an optimum number.

Structure Collaborative Learning Activities. Collaborative learning activities can increase learner-to-learner interaction leading to social presence (Rovai, 2001, 2002; Whiteman, 2002). However, in order for these activities to work well, they need to be planned in advance. Such activities can include group work, group discussions, brainstorming, group assignments, group projects, and online group debates. In addition to creating social presence, collaborative learning activities have the potential to encourage students to search for facts and theories, thus removing the task of being the sole repository of knowledge from the instructor (Whiteman, 2002). However, as Rovai (2002) cautions, "Online instructors must ensure equal opportunities for participation by all students" (n.p.).

Instructors. Instructors play a significant role in establishing social presence for online environments. In this section, I discuss some of the specific ways in which instructors can create such an environment.

Contribute to Discussion Boards. Typically, the electronic discussion board is part of an online environment. What we as instructors often times forget is that the discussion board takes the place of the verbal discussion and interaction that occurs in a face-to-face classroom. Therefore, instructors should not be passive but should be actively involved in the discussions taking place in this medium. Not participating is the equivalent of lecturing for the entire period of a face-to-face class and then leaving without any interaction with the students. It is also the equivalent of putting students into a small-group activity and not interacting with the small group or debriefing the activity. The instructor should remember that discussion still needs to occur in these environments, and this form of interaction helps establish a social connection with all members of the class.

However, as Rovai (2001) states, "Online instructors need not reply to all learner postings to course discussion boards" (p. 290), although participants should feel that their comments are being read. Interactions must be

deliberately structured in order to overcome threats to social presence. Instructors do this by "[balancing] the need for immediate responses with providing the opportunity for other members of the community to respond" (Rovai, 2001, p. 290). Those who are considered successful instructors are able to develop this sense of timing.

Promptly Answer E-Mail. Social presence is the extent to which individuals in electronic environments are perceived as real. In a face-to-face environment, participants come and meet with the instructors with questions, comments, and concerns. Consequently, there is no question as to whether or not individuals are real when they meet face-to-face. However, this is not always the case in the electronic environment. Think about times when you have sent an e-mail to someone and not received a timely response. Timely responses from instructors are valuable to the establishment of social presence in the online environment (Newberry, 2001). The technology automatically puts students at a physical distance in many instances, but instructors need to manage the process so that this distance is not an added difficulty. My rule of thumb is to answer student e-mail associated with a current class within twenty-four hours unless stated otherwise. Students need to feel that their messages are valued by the instructor and have the same amount of priority as any other message.

Provide Frequent Feedback. Feedback is critical in online courses. Participants need feedback related to areas such as assignments, participation, and their progress in the course. Whiteman (2002) recommends that this feedback be personalized and addressed to the individual student rather than given as mass feedback to the entire class. Although group feedback is needed, it's the individual feedback that establishes social presence by showing value for the student and his or her work. It may also be beneficial to check in with students on some regular schedule to determine whether there are any issues with which they need assistance.

Strike Up a Conversation. Each of our courses has roughly two hours worth of asynchronous instruction online, with a one-hour synchronous chat session each week. Although each instructor uses the synchronous chat session differently, one thing all instructors can do is strike up a conversation with students prior to officially starting class. Students typically start joining the chat about ten minutes prior to the official start time. I also try to log in early and use this time just to talk with students about anything other than the class. We talk about how everyone's week is progressing, the weather, where different people live, their families, and so on. The goal is to get to know more about each other.

Share Personal Stories and Experiences. I have found that sharing personal stories and experiences significantly facilitates social presence in online environments, basically in two ways. The first is by illustrating that the instructor is credible. Prior to taking my faculty position, I worked both as a community college administrator and a research-evaluation specialist in a Fortune 500 company. Because I am working with students in the field

of human resource development and community college leadership, this brings legitimacy to me as an instructor. The second way that sharing personal stories and experiences helps is by allowing students to see that I am human and that I have had experience working in the same areas they aspire to work in or may already be working in.

Because online programs are popping up around every corner, the best ones have to establish legitimacy. One way of doing this is hiring instructors who are real, and part of conveying this "realness" is sharing these experiences.

Use Humor. This strategy is related to the one previously discussed. Although self-disclosure promotes social attraction and bonding between individuals, humor is the invitation to start a conversation (Gorham and Christophel, 1990). Humor reduces social distance and conveys goodwill within the learning environment by serving as a factor in immediacy. Obviously, all humor must be in good taste and not be of the nature that offends participants.

Use Emoticons. Emoticons are facial expressions created through the use of punctuation marks on the keyboard. Although earlier technology only allowed the use of emoticons created through punctuation, much of today's technology will translate those expressions created through punctuation into an actual facial expression. Other systems provide facial expressions from which to select, which eliminates the need for the punctuation. Emoticons help convey the nonverbal cues of the communicator, which helps participants accurately interpret the instructor's messages.

Address Students by Name. Addressing students by name creates social presence in any environment. Students' names can be more difficult to learn in an online environment because many of the nonverbal cues we typically use to assist us are gone. Often students' names appear in the list of chat participants. However, some systems are simple Net IDs (much like those used in e-mail addresses), which prevent us from knowing who the participants are. This is where the student profiles can come into play. I print out the student profiles with their pictures and have them hanging next to my computer. This allows me to glance up and associate a Net ID not only with a name but with a face. It permits me to respond to students by addressing them on a first-name basis.

Allow Students Options for Addressing the Instructor. Formal titles establish a hierarchy within social situations. There is certainly a time and place for them. However, I don't believe titles are appropriate, especially in the online environment. I feel the use of formal titles creates a distance between the instructor and the participants.

I encourage students to address me in a way that is comfortable to them. I give them the options of Dr. Aragon, Professor Aragon, Steven, Steve, Dr. Steven, Dr. Steve, or just Doc. I also add a little humor at this point and tell them they may feel the need to address me by a not-so-pleasant name by the end of the course! Titles aren't important to me in the

teaching environment. I believe I can learn as much from many of the students as they do from me and possibly more. My particular titles simply acknowledge my job, which all parties already know, or indicate that I've been to school a little longer. If it makes students more comfortable to address me by one of my titles, that's fine. I simply don't want to decrease social presence by insisting on this.

Participants. Participants also need to assume responsibility for creating positive learning environments for themselves and others. In this final section, I offer suggestions to participants for facilitating social presence in the online environment.

Contribute to Discussion Boards. Just as instructors need to remember that the electronic discussion board takes the place of the verbal discussion found in a face-to-face classroom, so do the participants. Participating on a regular basis helps students get to know each other and helps the instructor get to know the students. It is very easy to be passive when it comes to discussion boards, and passivity leads to instructional and social experiences that are not fulfilling.

Promptly Answer E-Mail. Students need to remember that instructors too wonder about the "realness" of their electronic participants. I believe it is important for students to follow the same twenty-four-hour rule when interacting with their instructor via e-mail. Just as students can come to feel their messages aren't valued due to delayed responses from the instructor, the instructor can feel the same way.

Strike up a Conversation. Creating social presence is not the sole responsibility of the instructor. Therefore, participants can contribute to the social presence in their environment by initiating conversations themselves prior to the start of class. I sometimes get the feeling that students feel they should "sit quietly" on the Internet until the instructor is ready to begin. I encourage the opposite. I think it's important that camaraderie be built by all. In fact, it doesn't bother me that students have private chats with each other during the class session. If our goal is to replicate, as closely as possible, the social presence from a face-to-face environment within an online environment, we should welcome this as long as it's not distracting for others. Because of the private chat features in most communication software, the private chats aren't even visible to the instructor or other students.

Share Personal Stories and Experiences. Experiences vary across students and between the students and instructor. Students should feel comfortable sharing their own personal stories and experiences as they relate to the topic. This establishes social presence among students and with the instructor. It also contributes to active participation in the class.

Use Humor. The same rule applies to participants that applies to the instructor. Humor can do much in reducing social distance, but it should be in good taste.

Use Emoticons. Participants too should provide nonverbal cues through the use of emoticons. Many times, as an instructor, I've wondered if a posted

statement was presented in anger, frustration, or any number of other emotions. Emoticons help the instructor accurately interpret participants' messages.

Use Appropriate Titles. Address the instructor by a title of identification that is comfortable to you, yet within the guidelines provided by the instructor. Addressing someone in a way you are uncomfortable with tends to decrease the level of social presence between the two of you. If the options given are not comfortable to you, talk with your instructor. Even though the options may not expand, just getting to know your instructor on a more personal basis can be helpful in establishing presence.

Conclusion

The use of online delivery as an education and training method continues to expand across various settings. For educational settings, literature provides evidence that students do not persist at the same rates as students in traditional face-to-face programs (Rovai, 2002). Although not much is known about how participants in training settings feel about the online environment, it is logical that users of this medium would want to seek ways for making the experience as enjoyable as possible. One means of doing this from the outset is through the establishment of social relations within these environments.

The strategies discussed in this chapter are not new. However, trying to establish social presence in a computer-mediated environment is no doubt more difficult to do and requires a conscious and deliberate effort on the part of the course designers, instructors, and participants. The strategies presented in this chapter may seem simple. However, from my experience of working in this environment for the past several years, they are often taken for granted. Therefore, course designers, instructors, and participants are encouraged to incorporate the strategies that are appropriate for their environments.

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