Threaded Discussion

Karen Swan
Kent State University, USA

Threaded discussion is a kind of *computer-mediated communication* (CMC). Specifically, it is an online dialog or conversation that takes the form of a series of linked messages organized topically. Threaded discussions are text based and asynchronous; they develop over time as participants separated in time and space read and reply to existing messages. Messages in a given thread share a common topic and are linked to each other in the order of their creation. Threaded discussions are particularly useful in online venues where multiple discussions develop at the same time. They grow like crystals, with multiple threads expanding simultaneously rather than evolving linearly. Without them, discussion participants would confront a chaotic, unsorted list of messages on many different topics. By linking responses to messages within a common subject line, threaded discussion makes it easier for participants to focus on one conversation and avoid the distractions of unrelated postings.

Threaded discussions are also significantly different from face-to-face discussions, beyond the simple aspects of their form. To begin with, all students have a voice in threaded discussion and no one can dominate the conversation. The asynchronous nature of the discussion also makes it impossible for even an instructor to control. Accordingly, many educators note that students perceive online discussion as more equitable and more democratic than traditional classroom discussions (Eastmond, 1995; Harasim, 1990; Levin, Kim, & Riel, 1990). In addition, because it is asynchronous, threaded discussion affords participants the opportunity to reflect on their classmates' contributions while creating their own, and on their own writing before posting them. This tends to create a certain mindfulness among students and a culture of reflection in an online course (Garrison, 2003; Hiltz, 1994; Poole, 2000). Finally, despite the fact that it is text based and so lacking in visual and verbal cues, most participants find it strangely personal (Gunawardena & Zittle, 1997); indeed, Joe Walther (1994) has called it "hyperpersonal." Because it so appears to be a unique feature of online learning, threaded discussion has attracted the attention of researchers and practitioners since its infancy as a kind of computer-mediated communication. One way to think about threaded discussion is to conceptualize it within a framework adapted from the work of several seminal theorists of online learning.

We begin with Michael Moore (1989), who identified three kinds of interactions that support learning in general, but that are particularly important to implement online: *interaction with course content*, *interaction with instructors*, and *interaction with classmates*. These have proved useful constructs for thinking about online learning up to the present. Interaction with content refers to learners' interaction with the knowledge, skills, and attitudes being studied. Interaction with instructors includes the myriad ways instructors teach, guide, correct, and support learners. Interaction with classmates refers to interactions among learners, such as through debate, collaboration, discussion, and peer review, as well as the informal and incidental learning that typically accompanies formal classes. In 1994, Hillman, Willis, and Gunawardena noted the importance of a fourth type of interaction, interaction with interface, which they defined as the interaction that takes place between a student and the technology used to mediate a particular distance education process.

In 1999, Garrison, Anderson, and Archer, who were particularly interested in online discussions which they conceptualized as communities of inquiry, developed a model that situated learning in threaded discussion at the intersection of three kinds of presence manifest within them that roughly equate with the three kinds of interactions conceptualized by Moore (1989). *Cognitive presence* is the extent to which participants are able to construct meaning through sustained communication. *Teaching presence* includes subject-matter expertise, the design and management of learning, and the facilitation of

active learning. *Social presence* is the perceived presence of others in mediated communication, which Garrison et al. contend, supports both cognitive and teaching presence through its ability to instigate, sustain, and support interaction. What Garrison et al.'s model added to Moore's conceptualization is a functional approach that focuses on the nature of interactions and the notion of overlapping spheres of influence concerning them. That is, they realized that within threaded discussion, all participants share responsibility for presenting concepts and ideas, for supporting learning, and for developing the social community within which learning takes place.

Putting these all together, we have the model of online learning in general, and learning within threaded discussions in particular, shown in Figure 1. The model, borrowing from the community-of-inquiry model (Garrison et al., 1999), places learning at the interface of interactions with course content, instructors, and classmates (Moore, 1989), and at the center of the three kinds of presence that support online discussion—cognitive, teaching, and social. It further conceives all of these interactions as mediated through the online interface (Hillman et al., 1994). In the sections that follow, what we know and what we need to know about threaded discussions will be reviewed through the lenses of each of the subcomponents of this model. The author will do this in a somewhat reverse order (beginning with social

Figure 1. Factors affecting learning online (Swan, 2003)

presence and ending with interface issues) because that is the way research in the field has evolved historically.

SOCIAL PRESENCE

Social presence can be defined as the perceived salience of others in online discussions. Research on it is directly related to research on immediacy in traditional classrooms. Indeed, there is a considerable body of research on face-to-face teaching and learning that suggests that teacher immediacy behaviors can significantly affect student learning (Christophel, 1990; Gorham, 1988; Richmond, 1990; Rodriguez, Plax, & Kearney, 1996). Immediacy refers to behaviors that lessen the "psychological distance between communicators" (Weiner & Mehrabian, 1968, p. 17). Educational researchers have found that teachers' verbal (i.e., giving praise, soliciting viewpoints, humor, self-disclosure) and nonverbal (i.e., physical proximity, touch, eye contact, facial expressions, gestures) immediacy behaviors lead, directly or indirectly, depending on the study, to greater learning.

This research has important implications for online learning. Social-presence theory (Short, Williams, & Christie, 1976), media-richness theory (Rice, 1992), and Picard's (1997) more recent notion of affective channel capacity argue that differing media have differing capacities to transmit the nonverbal and vocal cues that produce feelings of immediacy in face-to-face communications, and so have questioned the capacity of some media, threaded discussion in particular, to promote learning. The argument is that low-bandwidth media transmit low social presence, and so cannot convey the social support necessary to sustain learning.

Researchers experienced with online teaching and learning, however, contest this view. What is important, they contend, is not media capabilities, but rather personal perceptions (Gunawardena & Zittle, 1997; Poole, 2000; Rourke, Anderson, Garrison, & Archer, 2001; Walther, 1994). Of course, in online discussions the role of instructors often shifts from discussion leaders to discussion facilitators, and students commonly assume more responsibility (Coppola, Hiltz, & Rotter, 2001; Poole). Research on social presence in online environments has ac-
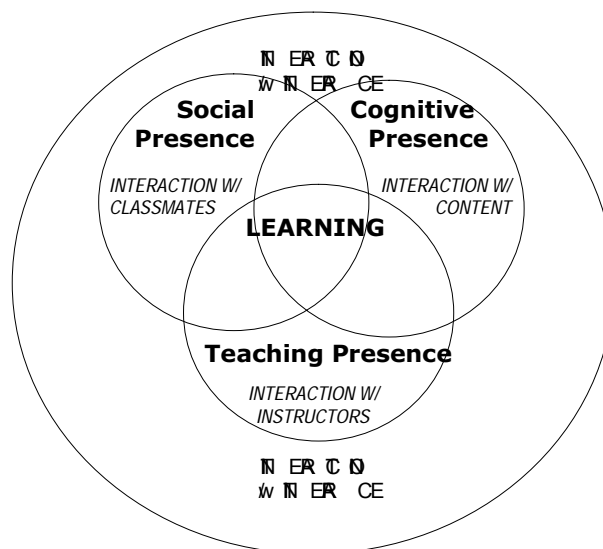
8 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/threaded-discussion/12358

Related Content

Universal Design for Learning
Frances G. Smithand Pamela LeConte (2005). *Encyclopedia of Distance Learning (pp. 1926-1928).*
www.irma-international.org/chapter/universal-design-learning/12370

Optimization of Piano Performance Teaching Mode Using Network Big Data Analysis Technology
Xiang Weiand Shuping Sun (2024). *International Journal of Information and Communication Technology Education (pp. 1-20).*
www.irma-international.org/article/optimization-of-piano-performance-teaching-mode-using-network-big-data-analysis-technology/341266

Cooperative Agents in Web-Based Distance Learning
Leonard Barolliand Akio Koyama (2009). *Encyclopedia of Distance Learning, Second Edition (pp. 454-463).*
www.irma-international.org/chapter/cooperative-agents-web-based-distance/11795

Adult Learners in Higher Education
Maria R. Correiaand Anabela Sarmento (2008). *Online and Distance Learning: Concepts, Methodologies, Tools, and Applications (pp. 618-626).*
www.irma-international.org/chapter/adult-learners-higher-education/27418

Robotic Teaching Assistance for the "Tower of Hanoi" Problem
Nguyen Duc Thien, Annalisa Terracina, Luca Iocchiand Massimo Mecella (2016). *International Journal of Distance Education Technologies (pp. 64-76).*
www.irma-international.org/article/robotic-teaching-assistance-for-the-tower-of-hanoi-problem/143252