

Chats and Shared Understanding

How Instructors Can Help Learners Use Academic Chat Rooms

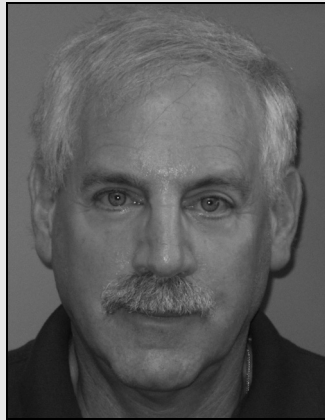
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INTRODUCTION

Online learning discussion formats provide an opportunity for learners to share their experiences, negotiate meaning, and take ownership of the subject matter. Chat rooms also provide learners with anyplace and real-time ways to participate in academic discussions. Given that discussion leading to shared understanding is an expectation in many online courses and given the

ubiquitous nature of synchronous electronic communication, such as instant messaging, among the upcoming generation of higher education students, questions arise concerning how synchronous electronic learning spaces can contribute to the construction of shared understanding.

Shared understanding occurs when individual experience mediated through group discourse becomes collective thought that



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emerges from the exploration and analysis of personal experience, text material, and the construction of ideas from critical group dialogue. Achieving shared understanding involves responding to and synthesizing peer messages as well as thoroughly exploring difficult issues (Littleton & Whitelock, 2005). Shared understanding is the blending of private thought with public dialogue.

Increasing our understanding of how shared meaning develops through computer-mediated, real-time communication may help instructors design and facilitate discussions that lead to higher-order thinking in online inquiry-based environments. In this article we will first discuss the framework for using academic text-based chats in our course. A second section will describe the process the learners use to create shared meaning. In the concluding section, we will present recommendations for practice, an outcome of lessons learned from our experience in designing academic chat spaces.

As college instructors, we are challenged by the tasks of combining our learners' experiences with course content to develop higher-level cognitive skills, particularly the ability to integrate the various forms of knowledge, create an argument based on critical thinking, and develop self-regulated learning. During the past 5 years, we have been blending classroom instruction with Web-based learning to provide choice and learner control over the educational experience. Specifically, we give learners the opportunity to choose whether they will conduct small-group discussions in person or in chat spaces online. The outcome of the discussion is a group posting to the rest of the class that resolves a dilemma we pose each week.

Many of our graduate and undergraduate students are part-time on campus due to work and family responsibilities. The choice of discussion formats has provided opportunities for learners to participate in various ways without having to choose

between coming to a classroom and family and work obligations. Fulton (1991) suggests a relationship between the course learning space and learner satisfaction with a course. His SPATIAL model posits that (a) learners' perceptions of space affect their satisfaction, participation, and achievement; (b) certain aspects of a space are subjective; and (c) the authority that is conveyed by the physical environment and its layout can be changed. Having the ability to choose whether to work collaboratively in physical space or cyberspace ameliorates an authoritarian learning environment by providing more learner control over the educational environment.

However, we must still be able to foster online the same level of intellectual excitement and meaning-making that might be present in the physical classroom while providing adult learners with the time and place of their choosing to accomplish the intellectual work. As expressed by a learner in our spring 2007 class, there is a tradeoff between having visual cues and having the opportunity to carefully consider the ideas presented in the chat space:

My main concern with learning in an online environment is that you lose the ability to recognize tone and body language signals that would normally be helpful when interacting in an in-person group. On the flip side, I expect that an online learning environment will cause me to be able to more freely provide input at times when it is more convenient for me and will allow me to more carefully consider my input before putting it out there.

In our course, multiple chats occur during the same time; therefore, the instructor's presence can only be minimal in conversations taking place concurrently across multiple online locations. If our goal is to promote higher levels of critical thinking and to encourage self-direction among our learners, the question remains as to

how students negotiate through the chat in order to arrive at shared understanding with minimal interventions from the instructor. How can college instructors use the chat room as a tool for constructing knowledge and provide a space for academic conversations?

A growing body of literature explores ways in which learners use synchronous communication tools and the different ways students respond online in synchronous as compared to asynchronous learning designs. Asynchronous communication, such as a discussion board, is thought to encourage more time on task, while synchronous forms of communication, such as chat rooms, seem to generate higher levels of social and community-building responses (Bober & Dennen, 2001; Chou, 2000; Hrastinski, 2006; Hines & Pearl, 2004). Yet chats seem to encourage more soliciting of ideas, responses, and information, as compared to statements posted only on a discussion board (Hrastinski, 2006). In addition, chats are useful as a medium for giving and receiving advice on specific aspects of course work, for providing a sense of being in a class, and having a shared learning experience (Hines & Pearl, 2004; Hrastinski, 2006). Through real-time chats, students may feel less distant from other learners and more confident in their class performance (Hrastinski, 2006).

We have found that online discussion boards provide opportunities for individual students to form an understanding of the issues over a period of time. However, the asynchronous nature of discussion boards seems to be less dynamic than conversations occurring in real time (Stein & Wanstreet, 2006). Asynchronous discussions lack the spontaneity, responsive feedback, and intellectual challenges to thought that immediate conversation conveying a sense of learning together can bring to the learning environment.

CREATING SHARED MEANING IN A COMMUNITY OF INQUIRY

In our online class design, we have used the Community of Inquiry model to build shared understanding. The development of shared understanding is associated with higher order thinking and is thought to proceed through a series of events: triggering questions, exploration, integration, and resolution (Garrison, Anderson, & Archer, 2001). Triggering questions reflect puzzlement or problem recognition. Exploration involves information exchange or suggestions offered for consideration. During the integration phase, learners critically link concepts and develop tentative hypotheses. Learners in the resolution phase write and critically critique solutions arising from the group conversation. To support the development of shared understanding, learners must also provide a sense of group membership by creating enjoyable group interactions and personally fulfilling learning activities (Rourke, Anderson, Garrison, & Archer, 2001). In an academic chat space, facilitative talk is used to keep the chat on task, provide direct instruction, and give guidance on how to proceed through the instructional space. Social and facilitative conversations are necessary for an academic chat to achieve shared meaning (Anderson, Rourke, Archer, & Garrison, 2001). An example of facilitative talk is illustrated in this comment from an undergraduate learner in spring 2007: "Looks like we are all here! I volunteered to moderate for this week ... but before we begin ... do we want to determine who will moderate next week?"

So how does shared understanding develop? From our experience with chat rooms, we suggest that learners work through a natural dialogic process leading to shared understanding. Collective understanding of an issue requires dialogue that helps group members understand various perspectives deeply. A pattern for academic chat evolves from the use of the four events leading to meaning

making. Our inquiry shows that a chat typically begins with a student comment indicating a triggering event followed by exploratory statements and integration (Stein et al., 2007). Tentative solutions in the integration phase are not automatically accepted in an effort to resolve the issue. Instead, solutions may be followed by exploratory statements or triggering events, indicating the testing of solutions in the context of each learner's experience and personal meaning. The following excerpt from a spring 2006 chat illustrates the pattern of meaning making:

JESS: Can someone be educated without an extensive formal education? (triggering event)

GABI: Yes.

FRAN: But I think "learned" means acquiring some information or knowledge and applying such things to real life through an informal ways [sic] such as experience or practice, not schooling. (exploration)

GABI: They can be educated through life and the experiences that are brought on by it. (exploration)

JESS: So, people can become educated through formal education, and they probably can become educated through other means as well, for example reading on their own. (integration)

FRAN: Yes. Then how can we define about [sic] a "learned" adult? (triggering event)

Exploration comments increase over time as members share different perspectives in depth. Exploratory statements may be followed by responses indicating agreement (e.g., "Jay, we may be saying the same thing.") Resolution comes near the end of a chat and may be followed by compliments or expressions of agreement (Stein et al., 2007).

Shared understanding involves exploring difficult issues thoroughly and synthe-

sizing group members' diverse perspectives. Group members ultimately come to a collective understanding through exploration of their individual experiences and knowledge. As members see the text on the screen and respond to it through questioning and collective exploration of a theme, a transition from individual thought to shared understanding begins. We found that learners work through a cycle of triggering events, exploring various aspects of an issue based on personal experience or interpretation of text, integrating various positions, and finally coming to resolution. While the cycle is not always followed in this fashion, our inquiry did show that all aspects of the cycle are covered in order for the group to achieve shared understanding of an issue (Stein et al., 2007).

A learner from spring 2007 presents her experience as one in which mutual teaching and learning took place in the chat room:

When we were going to meet in small groups for chats and discussions about the weeks [sic] topic, I was not happy. It seemed like a cop-out and an easy way to teach. However, as the weeks went on and the readings progressed, I found that I was learning many different viewpoints by being in these chats. My group was very diverse and it opened my eyes to many things I would not have thought about or gotten on my own. I also liked it when I would contribute a thought or mention a specific part of the readings and the group would ask me to elaborate or say they did not think of that. It was I teaching them and them teaching me.

Shared understanding emerges in a chat room from the interaction of various individual viewpoints; and through critical inquiry, a collective thought is developed.

RECOMMENDATIONS FOR PRACTICE

Based on our experience in designing academic chat spaces, instructors should be aware that learners in a chat room follow a

process in order to reach shared understanding. The pattern might begin with group members exhibiting their presence socially by acquainting and re-acquainting themselves with each other. Instructors should expect that in a chat room social comments not related to the course content are still a necessary part of the instructional process. Facilitative talk is used to orient the group to the learning task. Social and facilitative comments seem to be necessary as preludes to the work of meaning making. Instructors should encourage social comments and communicate prior to the chat expectations for the chat; that is, the outcomes.

Instructors can promote using chats as a way to provide a space for all learners to express their voices and to make the space an authentic place for building group cohesion. In our experience, chats are useful as a medium for giving and receiving advice on specific aspects of course work. Chats are also useful for providing a sense of being in a class and having a shared learning experience, thus perhaps helping students feel more confident in their class performance (Hrastinski, 2006). Chat rooms can also reduce the feeling of being distant from other learners. Learners may be reluctant to engage in chats but do see the relevance of electronic learning to the skills needed in the workplace, as a learner from our spring 2007 class attests:

I'm slightly apprehensive about taking on-line classes because of the idea of communicating solely online for an extended period of time. I'm concerned because I find it easier to explain my thoughts personally as oppose [sic] to online. Despite my anxiety, I believe it is necessary to be able to communicate accurately online because it's a skill that will be very useful in the future in the workplace.

Instructors can caution learners that academic chat is not the same as casual chat, such as instant messaging. Instructors might provide an orientation to chat dis-

cussions, including written guidance on how to use triggering, exploratory, integrative, and resolving statements to maximize learning in a chat environment. Instructors might note that each member of the group can play a part in providing the social cohesion and facilitation necessary to move the group toward resolution.

Instructors might monitor chats, not to interfere in the meaning-making aspects of the chat, but to provide feedback on more efficient use of statements leading to shared meaning. In the absence of feedback, learners in the chat room will allocate their time to the social, facilitative, and content statements in a similar way from chat to chat. Over time, learners do not seem to change strategy for achieving resolution, nor do learners change the pattern of how they allocate their chat time (Stein et al., 2007). How to make use of an academic chat room is a skill. We suggest that the majority of talk be invested in academic discourse rather than in social or facilitative comments.

An instructor does not need to regulate the chat. Participants, through the use of facilitative comments, will structure their learning. Group members establish norms that militate against disjointed thoughts and inconsiderate treatment of one another. An undergraduate student posted this norm to guide her chat team in spring 2007:

Sometimes people say things that are disrespectful to other learners who don't see things the way they do. In that respect they get very harsh in the things they say. I am a firm believer that if you can't say what you type to my face then refrain from typing it. I value everyone's opinion but please state it in a respectful manner.

An instructor can improve the way in which chat members achieve shared meaning by providing specific opening statements for students to use as a means of encouraging higher order thinking, such as requesting evidence for a given

position. Instructors might consider meeting with chat members after a chat to discuss the statements that would move the group through the inquiry cycle.

When used in the context of a community of inquiry, learner-moderated chats lead to the space in which shared meaning develops. Chats provide a more casual, immediate environment than do asynchronous discussion boards. Chats give learners the opportunity to transform their personal meaning into shared solutions through a nonlinear process of asking questions, exchanging information, connecting ideas, and defending solutions.

Chats provide a space in which to explore the multidimensional nature of an issue in an informal way. At an individual level, chats give learners the ability to reflect on their thoughts as they type them in the message entry area. Based on the direction of the conversation, learners are able to make revisions before they send their comments. In addition, the group as a whole has the ability to see the progression of logic and higher-order thinking as the text unfolds on the members' computer screens and is revised, amplified, and integrated into shared understanding through feedback. Such a pattern can operate in the absence of direct instructor presence as learners negotiate through chats to resolve ill-defined problems.

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