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## Fostering Presence in Online Discussions

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### Abstract

With increased demands for online courses, instructors are challenged to facilitate discussions that promote critical thinking and mastery of content. Synchronous and asynchronous discussion forums are used to create a Community of Inquiry (COI) across four respective disciplines and areas: English as a Second Language (ESL), Teacher Education, Industrial Technology, and Human Resource Development (HRD). Understanding the benefits and limitations of each forum and their applications allows instructors to facilitate quality online discussions that foster development of social, cognitive and teaching presence.

### Introduction

The 21<sup>st</sup> century is characterized by new methods of communication, which have moved from letter writing to emails, texts, and social networking, which are inherent to U.S. college students. Virtual learning environments (VLEs) move from instructor-driven to learner-customized environments through Web 2.0-based Internet platforms (Kompen, Edirisingha, & Monguet, 2012). These platforms foster collaboration between instructor and student allowing faculty and students to engage in critical thinking and deeper collaboration (MacKnight, 2000).

New technologies offer educators a variety of asynchronous and synchronous approaches; however, limited literature describes ways forums are used to develop a *community of inquiry (COI)* incorporating social, cognitive and teaching presence necessary for higher order thinking and learning (Arbaugh, 2008; Mandernach, Gonzales, & Garrett, 2006). The purpose of this article is to explore limitations, benefits and applications of online discussion forums that provided different opportunities for developing a *COI* across four respective disciplines and areas: English as a Second Language (ESL), Teacher Education, Industrial Technology, and Human Resource Development (HRD).

### Presence in an Online Forum

Based upon social constructivist theory, Garrison, Anderson and Archer's (2000) COI framework suggested that instructors consider three areas of student learning in online environments: *cognitive presence*, *social presence*, and *teaching presence*. *Social presence* is how people socially interact within learning environments. Researchers need to "consider a host of new things related to social presence with continued blurring of boundaries between classroom and fully online courses as well as course bound communication tools (e.g., discussion forums)" (Lowenthal, 2010, p.21). Garrison (2011) defines social presence as "the ability of participants to identify with the group or course of study, communicate purposefully in a trusting environment, and develop personal and affective relationships progressively by way of projecting their individual personalities" (p. 34).

*Cognitive presence* is the construction, exploration and confirmation of understanding through reflection and collaboration within a COI. "Cognitive presences is defined in terms of a cycle of practical inquiry where participants move deliberately from understanding the problem or issue through to exploration, integration, and application" (Garrison, 2007, p. 65). Akyol and Garrison (2011) noted that "establishing and sustaining cognitive presence and deep approaches to learning in online and blended learning environments are dependent upon a dynamic balance of all the presences to support a collaborative community of inquiry" (p. 246).

While social and cognitive presences are integral, a strong *teacher presence* is required for students to engage in higher-order learning necessary to gain competence in their fields of study. Teacher presence may focus on dialog or discourse. Facilitation may support a dialogue "with minimal shaping of the course of the discussion. Discourse is disciplined inquiry... [requiring] a knowledgeable teacher with the expectation that discourse progresses in a collaborative constructive manner and students gain an awareness of the inquiry process" (Garrison, 2007, p. 67). According to Garrison, Anderson and Archer (2010), the CoI instrument provides a means to study the dynamics of online communities of inquiry, both among and within the presences (p. 9).

### **Asynchronous Platforms**

*Asynchronous learning* (on demand) forums are a popular means to foster course discussions when instructors and learners are in different locales. Advantages of using asynchronous discussion boards include students having additional time to create responses, and postings are less intrusive than real-time meetings (See Figure 1: <http://db.tt/Z5xQWaPe>). The Academic Technology and Creative Services (ATCS, 2009) noted that "asynchronous discussions can be just as beneficial as traditional face-to-face discussions, if not more" (p. 1). Asynchronous tools help students with "reflective dialogue...making reflection an interactive, shared process rather than merely a solitary process and...facilitate[s] the constructivist method of reflective knowledge acquisition" (Bye, Smith, & Rallis, 2009, p. 843).

While asynchronous discussions allow students to engage in the reflective process, they also have disadvantages (see Figure 1 <http://db.tt/Z5xQWaPe>). According to McInnerney and Roberts (2004), asynchronous activities may not facilitate the types of interactions necessary for discourse or "automatically become interactive and collaborative" (Pawan, Paulus, Yalcin, & Chang, 2003, p. 137). Low social presence can be problematic in text-based asynchronous discussion forums, as miscommunication can occur whereby, "a learner's connectivity and sense of belonging (relatedness) may be reduced, as may perceived competences [reducing]...social interaction" (Giesbers, Rienties, Gijsselaers, Segers, & Tempelaar, 2009, p. 301). Research

concerning asynchronous forms of communication has largely focused on students' perceptions of their learning (Rourke & Kanuka, 2009). Therefore, it is important to provide examples across disciplines of how instructors use asynchronous discussion forums to create a sense of presence.

### **Asynchronous Forums in Practice**

#### *Wikis, Blogs, and Discussion Boards*

One example of using multiple asynchronous platforms occurred in an undergraduate ESL course beginning Spring, 2012. Students used online discussion boards, blogs, and Wikis to discuss basic course concepts. Students were provided online tutorials from the CMS and instructor. Timelines for online postings were essential; misconceptions were reduced or eliminated by requiring frequent postings by students to an online discussion board. The students clarified posts for their classmates and discussed basic content knowledge from the course.

With the use of blogs and Wikis, students discussed the course content in regards to real-life applications, and they shared resources with one another. As online discussions moved from theory into practice, a sense of *cognitive presence* evolved. The discussion board, blog and Wiki activities necessitated advanced planning and modeling by the instructor through ongoing posts to ensure learning moved from discussion to discourse. *Instructor presence* facilitated deep, meaningful discourse. Limitations existed for the platforms: Blogs, posted in reverse order, were time-consuming to grade, while the Wikis were easily deleted or edited by others.

#### *Pinterest for Discussion*

In Spring, 2012, the visual networking site Pinterest was selected for 100 pre-service teachers to explore new ideas in teaching and classroom management while gathering ideas by using images. Students chose Web-based resources to utilize in their own classrooms after graduation and pinned these items onto a class board (<http://pinterest.com/teachforkids/>) leaving reflective feedback on each posting regarding their rationale of why the pin would be valuable as a teacher. Postings allowed students to curate, share, and engage in practical, real-life applications of learning within a COI.

Although several students remarked that the site was a distraction, the majority of students showed a heightened sense of connection to the platform community. One student commented, "I loved using Pinterest because I think it helped to bring some of us together by facilitating discussions about what we pinned" (P031, 2012, p.7). Further discussions with classmates and instructor were documented using the CMS Blackboard as to why they chose certain pins, what they learned using Pinterest, and whether they would use it in the future.

The Pinterest activity was planned in advance; students were guided through the assignment with specific, written directions about content to be curated in order to reach the expected learning outcomes. Because the class Pinterest board was ever-changing, time and content management became important considerations; as each pin was checked, students were given feedback and grades recorded.

#### *Facebook, Twitter, and LinkedIn*

Three popular social media platforms, Facebook, Twitter and LinkedIn, provide spaces for interaction and social presence. An undergraduate online HRD class during Summer, 2012 utilized closed (private) Facebook Groups for teams to collaborate asynchronously while working on a project. Likewise, the class used Twitter to continue conversations in-between

classes (Bozarth, 2010). The instructor posed a *question-of-the-day*, tweeted reminders, and offered web-links to supplemental resources. In an HRD capstone course in Fall 2012, LinkedIn provided a professional way to network with experts (HR professionals) and develop their professional brand. Students explored the LinkedIn Help Center (<http://help.linkedin.com>) for advice. The class found open discussion groups where experts and organizational members responded to key topics. Students joined discussions, kept abreast of trends, and added their voice to conversations, increasing their marketability.

### **Synchronous Forums**

With the advent of new technologies, synchronous discussion forums are increasingly available to educators. Synchronous discussions allow users to communicate with one another in “real-time” through phones, instant messaging (IM), screen-sharing, videoconferencing, and face-to-face discussions with the convenience of distance education. Synchronous discussions reduce frustration that students may feel when waiting for responses during asynchronous communications.

Numerous advantages of using synchronous discussions for online learning have been documented in the research. Park and Bunk (2007) remarked: “Synchronous communication has a great potential to increase individual participation and performance” (p. 245) while enhancing social interaction within online courses (McInnerney & Roberts, 2004). However, several disadvantages are noted. Not all students have the software, hardware, or bandwidth necessary to connect with classmates. Finkelstein (2006) said, “Most tools that transmit audio or video on the Web will have some degree of latency—a delay between the time something is actually said or done to the time those words or images arrive for remote participants” (p. 143). Time zones may hinder participation, and many synchronous platforms are costly creating institutional limitations for use (see Figure 2- <http://db.tt/70I5IYIR>)

### **Synchronous forums in practice**

#### *Instant Messaging (IM), Chat, and Collaborate*

An example of incorporating a synchronous platform occurred in an undergraduate Total Quality Management (TQM) course within an Industrial Technology program from the Fall, 2010 to Spring, 2013. Prior to the first meeting, students received an email explaining how to access Blackboard Collaborate; the first class meeting lasted about 45 minutes and introduced the course. Collaborate allowed students and instructor to communicate for setting weekly meeting times to discuss course content, presentations, and other pertinent information. In addition, the instructor used Collaborate as a review portal for exams by organizing sessions and asking questions through video conferencing and instant messaging (IM).

Collaborate was used similarly in an ESL education course, except that the instructor required all students to connect at a specific time. Students entered separate chat rooms for group activities; the screen sharing option allowed the instructor to share documents and conduct presentations as necessary. One disadvantage (see Figure 2- <http://db.tt/70I5IYIR>) of the Collaborate session occurred when students engaged in “sidebar” conversations that were distracting to classmates. Also, when used with a large group, sessions became difficult to moderate while some students were typing comments and others were voicing comments. However, both *cognitive* and *social presence* were established as discussions encouraged reluctant students to ask questions; and, it supported collaboration within a culture of respect, allowing for a deeper understanding of the material.

The students used IM through the CMS to discuss assignments and connecting to instructor for virtual office hours. The CMS allowed the IM system to instantly convert to a Collaborate session which permitted screen sharing and white board applications with individuals or small groups. IM helped establish the *teacher presence*, further developed through online chats and Collaborate class sessions. In addition, the students were able to discuss their applications of the theories and clarify misconceptions, building *cognitive presence*. However, one issue at the beginning of the ESL course was some students' unfamiliarity with the technology. Once the students gained understanding, they discovered applications beyond what the instructor planned, including virtually connecting with students in other classes.

### *Adobe Connect*

Globally, students connected with face-to-face students through the web conferencing software Adobe Connect (AC). One Saturday per month, paraprofessionals engaged in professional development activities while collaborating with specialists from a variety of backgrounds. Using AC, students had meaningful conversations on topics ranging from school law to classroom management. The instructor promoted a COI by assisting student-to-student discourse. Students heard how schools globally dealt with educational issues, asked important questions and made valuable connections with peers as well as professional educators. When using platform tools such as AC, the instructor must consider time zones as several students were meeting during the day while others were foregoing sleep to meet at night; further, not all learners had access to high-bandwidth necessary to stay connected to peers and required frequent re-connections.

### *Second Life*

The 3D space of Second Life (SL) provides a sense of presence and *immersion* (feeling of being in same location) that some instructors and students find more compelling than traditional venues (Texas A&M University, 2009). Real-time interaction occurs through the use of an avatar (on-screen character) and voice and text chat. During the 2011-12 school year, a 3D safety laboratory (built from digital images of a working lab) was constructed as a prototype to explore the emerging field of Nanotechnology (McWhorter & Lindhjem, 2012). Instructor and students toured the virtual lab interacting at safety stations such as adding safety goggles, respirator mask, and lab coat to their avatar (see: <http://db.tt/QmcJWAit> for images). SL creates a space allowing movement, experiential learning, and real-time group meetings (RTGMs) with instructor and students (McWhorter, 2010).

## **Discussion and Conclusion**

Today's technology provides instructors with a variety of platforms to use to create a COI. When making a decision about the appropriateness of a forum, consider the following recommendations:

- Choose forums that foster a COI
- Train students and ensure they have the technology necessary for the platform
- Multiple forums may be appropriate for one course
- Consider advantages and disadvantages of forum
- Keep high expectations and a strong *teacher presence* to ensure meeting learning outcomes.

In four distinct disciplines, instructors utilized different online discussions forums to create a COI that promoted cognitive, social and teaching presence. While limitations existed for each forum, the instructors carefully chose the appropriate forums for their disciplines and planned discussions within the COI framework to ensure that online discussions were meaningful, customized, and promoted critical thinking and deep collaboration.

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