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Lessons Learned on Facilitating Asynchronous Discussions for Online Learning

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Abstract: The strategies used to facilitate online asynchronous discussions are the focus of this article. Previous research studies have investigated instructor-led discussion forums and facilitation strategies used by online tutors and course instructors. This article reports studies conducted to investigate alternative ways to design and facilitate online asynchronous discussions in the context of an online Master program in curriculum and instructional technology at a large university in the United States. Findings showed that online students preferred small group discussions led by their own colleagues in opposition to instructor-led discussions. When taking the lead on facilitating online asynchronous discussions, students use a variety of strategies more conducive to the generation of innovative ideas, authentic conversations and motivation to participate.

Keywords: Online learning, online asynchronous discussions, facilitation strategies.

INTRODUCTION

Online learning in Higher Education is growing across the world. According to the Sloan Consortium 2007 report (Allen & Seaman, 2007) online enrollments in the United States have continued to grow at rates far in excess of the total higher education student population with almost 3.5 million students taking at least one online course during the second semester of 2006. As Magano, Castro & Vaz De Carvalho (2008) explain on their analysis of e-learning in higher education, Portugal is not an exception to this tendency.

Online asynchronous discussions have been widely used as a platform for exchanging information, communicating, evaluating and supporting online learning. However, the quality of online participation has been one of the challenges faced by online learning, since students might fail to engage in deep conversations and provide thoughtful and reflective contributions related to the discussion requirements (Dennen & Wieland, 2007). Students' participation in online asynchronous discussions are many times solely a mandatory exchange of information, which betrays the learning goals behind the use of discussion forums as part of online courses.

Previous studies identified several problems related to online asynchronous discussion such as limited student participation (Hewitt, 2005); inadequate critical analysis of peers' ideas (Rourke & Anderson,

2002); and lack of motivation, commitment, and time and failure to communicate effectively (Brooks & Jeong, 2006).To address some of those challenges, a number of facilitation strategies have been described in the literature mostly focusing on instructors' facilitation roles (Anderson, Rourke, Garrison & Archer, 2001; Kim, 2008). As an example, Duffy, Dueber, and Hawley (1998) argue that facilitators should support increasing (a) the quality of an individual learner's analysis of the problem, (b) the quality of the counter-arguments, and (c) the quality of the evidence in the inquiry process. Other examples, are Paulsen (1995) and Mason (1991) description of teachers' moderation roles as organizational, social, and intellectual. When serving in an organizational role, the moderator sets the agenda, objectives, and procedures for posting and interacting in an online asynchronous discussion. The social role involves reinforcement of good discussion behaviors through welcoming messages and prompts feedback with a positive tone. The intellectual role, being the most important, uses techniques to encourage a high level of students' responses by asking questions, synthesizing key points, and nurturing the intellectual climate in online asynchronous discussions (Mason, 1991). More recently, Miranda-Pinto (2009), on her study on processes of collaboration and facilitation on online communities of practice among pre-school education professionals found a variety of moderation strategies used by the members of the community. These are (Miranda-Pinto, 2009, p.430-31): (1) get to know the members of the community, (2) use good computer-based communication strategies, (3) have some understating and experience with the topics at hand as a way to establish credibility, (4) link the content and topics discussed to practice in real contexts, (5) support sharing and candid exchange of information among members, (6) create a friendly and safe online environment, (7) provide enough time to organize and structure information, (8) address the acute social needs of the community by supporting a strong social presence, (9) help participants on overcoming challenges, and (10) motivate participation by valuing every contribution as an important step for knowledge formation and sustainability.

Although online tutors and instructors play a critical role in facilitating online asynchronous discussion, instructor dominated facilitation may result in instructor-centered discussion (Light, Nesbitt, Light & White, 2000) and limit students' active participation (Pearson, 1999) and voice. Rovai (2007) claims that instructors "should avoid becoming the center of all discussions and encourage student-to-student dialog" (p. 83).

This article explores one alternative strategy to facilitate online asynchronous discussions: the peer (or colleague)-facilitated discussions. If peer facilitation strategies or practices are able to promote meaningful dialogue and participation, then practical and theoretical implications can be drawn. From a constructivist perspective, online asynchronous discussions may create opportunities for students to construct meanings together and integrate new knowledge into their prior experiences (Rourke & Anderson, 2002). Asynchronous discussions as part of online learning should let students and instructors to interact in social environments without the boundaries of time and distance, promote students' critical thinking and support students on reflecting on their ideas as they work at their own pace (Hew & Cheung, 2007; Wang, 2007).

Peer facilitation does not hinder teaching presence but provides instructors with a platform where they can jump into the discussions by addressing misconceptions and helping students with their difficulties (Rourke & Anderson, 2002) as well as sharing their own points of view, questions and challenges. Using the criteria of achieving a thread depth with six or more levels, Hew and Cheung (2008) categorized successful peer-to-peer facilitation techniques into three phases: (1) introduction (establishing ground rules), (2) engagement (giving opinions/experiences, questioning showing appreciation), and (3) monitoring (suggesting new direction, summarizing, personally inviting people to contribute).

Stahl (2006) proposed the concept of group-mediated learning and indicated how co-construction of knowledge is best explained at the small group level. In online group discussions, a facilitator or a moderator often makes sure that meaningful dialogue occurs and students co-construct their knowledge together. In a student-facilitated discussion context, students take different roles and use different strategies to increase their peers' participation and help them better understand the content.

In his study on the nature of student participation in an online course, Poole (2000) found significantly longer and higher number of postings when the students served as course moderators.

The use of asynchronous facilitated discussions for online learning has far outpaced our understanding of how discussions should be used to promote student engagement (Garrison, Anderson & Archer, 2001). Despite the potential of peer-facilitation in online asynchronous discussions more research needs to be conducted to determine successful facilitation strategies and discussion formats that support meaningful interaction and student engagement. As an attempt to address this key gap, peer-facilitation was used in two different online courses (Correia & Davis, 2007; Baran & Correia, 2009) in the context of an online Master program in curriculum and instructional technology at a research university in the United States. This article summarizes these two case studies and extracts the major lessons learned that may be useful to readers teaching and learning in similar contexts and situations.

PREVIOUS RESEARCH STUDIES

Context

The online Master in Curriculum and Instructional Technology program was primarily designed for K-12 teachers (kindergarten to 12th grade) across the rural Midwestern United States. This is a three-year program consisting of 32 credits which is offered to a cohort of students every two years. Each cohort has 8 to 18 students, who are maintained as a group for the entire program. Most of the online courses offered on this program include weekly synchronous discussions about the topics and issues addressed in class.

Case 1: The design of collaboration in the virtual classroom

The first study (Correia & Davis, 2007) took place in the second semester of 2005 and first semester of 2006 and aimed at investigating the design of collaboration in two different online courses. A total of 31 students participated in the study with 80% of the students being in-service (active) teachers. They were elementary and secondary level teachers working teaching a variety of topics such as, History, Math, Science, English, Art and Technology. The remaining 20% of the students were students in the curriculum and instructional technology residential graduate program, but since some of them had full-time jobs that required a significant time commitment, these online courses were especially attractive to them.

The online courses were supported by the learning management and delivery system, WebCT, a Blackboard Inc. product, which was organized with a focus on resource sharing and discussion. Different discussion forums were created to facilitate the sharing of experiences and knowledge. In each of the online courses, students experienced three different collaboration designs. The formats were: (a) large group discussion facilitated by the instructor, (b) small group discussion facilitated by the instructor, and (c) small group discussion facilitated by peers.

The data was collected through a 13-item questionnaire. Ten items out of the 13 were Likert-scale items based on a five-point scale from "Strongly Disagree" to "Strongly Agree." These questions addressed level of participation in the discussions, quality of the feedback from classmates, use of critical analysis skills, team members' engagement, and learning by sharing reflections. Three open-ended questions were part of the questionnaire as well. These dealt with preferred discussion formats and reasons for such preferences.

Discussion facilitated by peers as opposed to the instructor was identified as the most popular collaboration design. When the discussion was moderated by the instructor many students treated the discussion questions as short answer essay questions and not as interactive discussion. Large group discussion facilitated by the instructors was not found as compelling or meaningful, as everyone "answered the same thing." The only motivation for students' participation was it being a class requirement. On the contrary, when facilitated by peers, students felt really connected during the discussions and motivated to participate. Peer facilitation fueled participation among students and created a strong sense of community.

Case 2: When students take the lead on online discussions

This second case (Baran & Correia, 2009) was a follow-up investigation that took place in the second semester of 2007. It aimed at identifying successful peer-facilitated strategies for online learning. Sixteen

students participated in this study. Four of the students were male and 12 were female, ranging in age from 22 to 55 years old. All students had a background on teaching and most of them were or used to be K-12 teachers.

The online course where data collection took place was taught to introduce students to models and theories of instructional design and at the same time teach them how to work as virtual team members as part of design teams. Therefore, different student teams engaged in a variety of instructional design projects (Correia, 2008). However, because discussion is particularly important when learning how to design instruction, participation in weekly online asynchronous discussions was also required. Readings/topics on instructional design principles, models, and strategies were addressed in these discussions. Students' participation in the discussions accounted for 20% of their final grade. WebCT was again the learning management and delivery system used to support this online class.

Every week, two students would volunteer to lead the discussion in a small group format (the 16 students were split into two small groups led by one of their peers). A limited set of facilitation guidelines were provided by the instructor and students were encouraged to explore different ways to promote meaningful dialogue and engage their peers in the discussions.

Data sources included online documents, such as: (a) student-led weekly discussion threads, (b) course-related materials (e.g., readings, syllabus, and schedule), and (c) guidelines on online asynchronous discussions (e.g., facilitator's role and responsibilities). Two main approaches emerge from the literature on examining online interaction. They are: (1) quantitative approaches such as, thread length, number of postings, and interaction patterns, and (2) the quality of interaction (Nisbet, 2004).

In this study the analysis was mainly a qualitative one of online asynchronous discussion threads (or postings) to identify successful student-led facilitation strategies. A discussion thread is defined here as "a hierarchically organized collection of notes in which all notes but one (the note that started the thread) are written as 'replies' to earlier notes" (Hewitt, 2005, p. 568). However, an initial quantitative data on participation, such as the number of instructor and student facilitator postings per week, was collected to help establish a pattern of participation in the asynchronous discussions.

This study identified three different successful peer-facilitation strategies exhibited by three different student-leaders (pseudonyms used). The first strategy, labeled "highly structured facilitation" was exhibited by Ross. He structured the discussion within a pre-existing framework (Ogle, 1986) and maintained strong and explicit connections to the topic under discussion. Ross organized the discussion around the questions of what the participants already knew, wanted to know, and learned in a pre-defined sequence before and after reading the assigned chapter for the week. In addition, the student facilitator, Sally, used an "inspirational facilitation" strategy by inviting her peers to imagine idealistic scenarios, search for inner goals, and discuss ways to achieve them. This facilitation strategy centered around the personal stories and contexts of practice rather than explicitly on the readings. Another strategy was a "practice-oriented facilitation" that encouraged participants to reflect on real-life situations and their actual teaching and learning contexts and make constant links to the reading material. The student facilitator, Nancy, invited responses from others, synthesized the ideas around examples, and made connections with the readings and the professional reality of each participant.

On different online asynchronous discussions, student facilitators chose different facilitation strategies, but all were able to promote meaningful dialogue and to produce high levels of participation and quality conversation around the weekly topics. It seems that student facilitators might have drawn from their experiences as learners and educators to define their facilitation strategies. Sally made the asynchronous discussions alive and personal, Nancy made them meaningful to their current practice, and Ross brought order and a system to a somewhat chaotic activity, such as asynchronous discussions. The highly structured facilitation strategy was particularly appreciated by the students as a way to make asynchronous discussions more effective and efficient in an online course.

LESSONS LEARNED

Even though exploratory and case studies cannot assure sampling representativeness, it is expected that the findings presented here can provide important information to be used in similar contexts and situations. The authors offer the following lessons learned from the above two case studies and the body of research on peer-facilitation hoping to establish some best practices on the design and facilitation of asynchronous discussions for online learning. The following paragraphs summarize these lessons.

Split your online class into small discussion groups

Since the chemistry in each community is unique and context-dependent, it is difficult to predict the number of students required for each discussion (Rovai, 2002). Yet, online students seem to prefer the small group (6-8 students) as opposed to large group asynchronous discussion format. They describe the small group format as easy to follow and more private in the sense that they can share their thoughts in a safer environment. They also feel that their voices are actually heard rather than getting lost in the midst of a large group discussion less meaningful and relevant. Therefore, particularly in larger class sizes, multiple group discussion forums can give students more chances to interact with each other (Rovai, 2007).

Be part of the discussions as the course instructor

Giving students the role of discussion facilitator does not mean that instructors should be removed from the discussion and/or would not also have a critical role to perform (Rourke & Anderson, 2002). For instance, the instructor's role in Case 2, in addition to set up the online discussions, was more of a contributor than a leader. She would share her experiences and/or her thoughts whenever critical issues arose. By constantly eliciting students' input on course activities as they developed, she strived to tailor activities so that they truly met learner expectations and inspired learner interest. Allowing students to facilitate, lead, and maintain a lively dialogue in the online discussions emerged from that feedback.

Instructors should consistently review students' comments and participate in the discussions as participants (or learners), sharing their own professional stories, providing advice, and offering resources. Instructors should also be attentive to what is happening on the discussions by addressing misconceptions, keeping a respectful tone, sharing insights on emergent issues, and making connections to the topics at hand.

Know the discussions' participants

Instructors should not expect that students become successful online asynchronous discussion facilitators just because they volunteer to lead a periodic discussion. The design of discussion activities should require a thorough learner and needs analysis. Instructors need to design the online activities to target learners' needs, expectations, and constraints. It is essential for the instructor to collect information about the context of the course along with the characteristics of the students to design the discussion experience for peer facilitation and to use the discussion activities to meet the students' needs (Baran & Correia, 2009).

Provide guidelines on how to facilitate a discussion

Careful planning needs to be put into the instructional activities, such as modeling online facilitation, being present in the discussions, as well as preparing students before they take the lead in the discussions. One suggestion is to prepare (or educate) the students to become discussion leaders. Instructors should model the discussion facilitation on the first weeks of the course to illustrate ways on how to effectively lead these discussions. Instructors can also provide guidelines for discussion defining everyone's roles and responsibilities for the online asynchronous discussions. For instance in Case 2, the instructor provided a short set of guidelines that defined students' and instructor's roles for the online discussions. These guidelines helped students to perform the activities such as setting up the agenda for the discussion, clarifying the purpose, encouraging participation, guiding the discussion by asking leading questions, keeping the discussion focused on the topics, encouraging multiple views and summarizing the discussion highlights (Baran & Correia, 2009).

Within the roles defined, students leading the discussions can be encouraged to explore different ways to promote meaningful dialogue and engage their peers into authentic conversations.

Select discussions topics linked to students' professional practices and/or needs

Discussions around miscellaneous topics that emerge from the students' professional practice and/or their needs show higher levels of participation. Students find these to be more concrete and accessible. They mention that when these topics arise they can thoughtfully contribute to the discussion as they feel well versed on the issues. Leveraging students' areas of expertise and prior knowledge in these discussions seems to increase interaction. "Authentic topics address 'real-life' challenges that adults can relate to and that provide a recognizable context for learning (Rovai, 2007, p. 81). Encouraging students to bring their life and professional experiences to the conversation, may help them to reflect on the events in their lives, bring their prior experiences to the foreground and to build on them creating new meanings and adding to the knowledge creation. Case 1 was an example of how peer-facilitation motivated participation and students felt really free to connect the online discussions to their professional practices and/or needs.

Align discussions topics to course assignments and tasks

Independently of discussion formats, levels of engagement in the discussion would decrease if the coursework is not closely related to the online asynchronous discussion requirement. If this happens, the discussions become something students will do on their "spare" time after working on the other course assignments and tasks. They do not perceive the asynchronous discussions as having a significant contribution to the course remaining responsibilities. Therefore, low participation on the discussions among the students is expected.

Let students volunteer to lead the discussions

By letting students volunteer to lead the discussions in exchange of extra points towards their final grade, allows for more commitment from the students' part. In Case 2, students enthusiastically volunteered for and embraced it as an opportunity to gain experience on leading online discussions and extend their knowledge on instructional design topics (Baran & Correia, 2009). Since facilitating a weekly or biweekly discussion was not an imposition on the students, they had more ownership and felt more motivated to do a good job.

Discussions facilitated by peers as opposed to the instructor are identified as the most popular online asynchronous discussion design. When the discussions are moderated by the instructor many students treat the discussion questions as short answer or essay type of questions and not as an opportunity to engage into a conversation with their colleagues and instructor. Large group discussions facilitated by the instructors are not as compelling or meaningful as everyone "answers the same thing" and it just becomes one more class requirement. On the contrary, when facilitated by their peers, students feel really connected during the discussions and motivated to participate. Peer facilitation fuels interaction among students and creates a strong sense of community.

CONCLUSIONS

In sum, instead of taking an authoritarian role in online asynchronous discussions, instructors can share the facilitation role with students, giving them the opportunity to explore unique ways to promote peers' active participation and meaningful dialogue. Since instructors may not be able to fulfill all of their moderation responsibilities because facilitating effectively online asynchronous discussion requires time and dedication, sharing the facilitation role with their students also has the potential to reduce the instructor's workload while teaching online.

Peer-facilitation in asynchronous discussions for online learning is able to generate innovative ideas, motivate students to participate actively in the discussions, and provide an atmosphere for involvement and commitment. This seems consistent with Tagg's (1994) direction "from within" approach to facilitation, a strategy that requires a reconsideration of facilitation roles, which are traditionally linked to leadership. The change of responsibilities means giving students the power to take practical and meaningful roles in the online classroom and it becomes an empowering

opportunity for students. However, a peer facilitation approach may not work similarly well in the general context, i.e. where "learning to facilitate" is not part of the instructional goals and objectives of the course, and students have no teaching background and/or facilitation experience neither online or face-to-face.

As a result, future research should examine peer-facilitation strategies in asynchronous discussions used in different academic and educational contexts. Since participants in the studies referred had a strong teaching background, this could have affected the dynamics of the online discussions and thus their proficiency on using facilitation strategies. Further research may also focus on the use of peer-facilitation in other disciplines and content areas. Future studies should also investigate how peer-facilitation strategies impact critical learning outcomes and student performance in online programs.

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Resumo: As estratégias usadas para facilitar discussões assíncronas online são o foco deste artigo. Muitos estudos de investigação exploram fóruns de discussão liderados pelo instructor e estratégias de moderação usadas por tutores e por instrutores online. Este artigo relata os estudos conduzidos para investigar maneiras alternativas de moderar discussões assíncronas online no contexto de um programa de Mestrado online em currículo e tecnologia educativa numa conceituada universidade dos Estados Unidos. Os resultados mostraram que os alunos do Mestrado online preferiram as discussões assíncronas em pequenos grupos e lideradas pelos seus próprios colegas em contraste com discussões lideradas pelo instructor. Quando os alunos lideram as discussões assíncronas online, uma variedade de estratégias de moderação é utilizada o que leva à geração de ideias inovadoras, conversações autênticas e a uma motivação para participar na discussão.

Palavras-chave: Ensino online, discussões assíncronas online, estratégias de moderação.

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