AN EXPLORATORY QUALITATIVE ANALYSIS OF GRADUATE STUDENT LEARNING AND DIVISION OF LABOR RESULTING FROM STUDENT COFACILITATION OF AN ASYNCHRONOUS ONLINE DISCUSSION

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This qualitative study is an exploratory, retrospective content analysis (Schwandt, 2007) of 81 debrief statements collected over 3 years and written by graduate students in an educational technology graduate program's educational leadership course taught 100% online. Researchers analyzed students' debrief statements of lessons learned and task and role distribution resulting from student cofacilitation of 1 week of an asynchronous online discussion (AOD). Findings show that the student cofacilitators learned about the benefits and challenges of cofacilitating AOD, further developed their understanding of the concept of leadership, cultivated their collaboration skills, negotiated the different tasks and role assignments between them, and utilized a variety of technology to prepare for and manage the AOD.

INTRODUCTION

Asynchronous online discussions (AOD), a form of computer-mediated communication, are a popular and effective strategy for engaging students in online courses (Hara, Bonk, & Angeli, 1998; Swan et al., 2000) and fostering constructivist learning environments (Baran & Correia, 2009; Maor, 2008; Rourke & Anderson, 2002; Rovai, 2007). A common characteristic of AOD is for a facilitator, also known as an e-moderator, to cultivate the exchange of ideas among learners focused on the content being studied (Rovai, 2007; Winograd, 2003). Typically, the facilitator is the instructor of the course, but individual students, instructors together with a student(s), or students with a peer(s), can also function as facilitators. The facilitator's roles and responsibilities will vary depending on the course and/or AOD goals, objectives, context, and participants.

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Students experience empowerment and ownership of their learning when they have the opportunity to contribute to their learning and their peers', a goal for instructors seeking to nurture constructivist learning environments (Cifuentes, Murphy, Segur, & Kodali, 1997; Maor, 2008). Rather than learning in purely instructor-driven environments, students contribute to the learning community and their socially constructed knowledge when they serve as AOD facilitators. Yet, facilitation of AOD can be a daunting task for any individual, particularly if that person is a student. Consequently, instructors can aid students either by facilitating with them, pairing them with other partner(s), or allowing them to choose their own partner(s) to facilitate a discussion together, that is, to "cofacilitate."

According to Knight and Scott (1997), cofacilitation involves "two or more facilitators working in partnership to enable a group and its individual members to reach an agreed outcome in a way that maximizes their own and others' learning, through the active involvement of all" (p. 85). Cofacilitation of AOD led by peers may assist students in the process of facilitating a discussion, as well as reap other benefits, but it may also pose distinct challenges. However, little research has investigated the cofacilitation of AOD led by a pair or a small group of students; therefore, there is a current need for such research. The purpose of this exploratory qualitative study was to examine: (1) what student cofacilitators learned and (2) how they divided up responsibilities for cofacilitating 1 week of an AOD in a master's level educational leadership course taught 100% online.

FACTORS AND BENEFITS OF STUDENT-LED FACILITATION OF AOD

Numerous factors contribute to the effectiveness of student-led AOD described in this study, not the least of which include providing clear guidelines, modeling expectations, ensuring an instructor presence, sharing information about role assignment possibilities, and requiring reflection about lessons learned and the distribution of responsibility for cofacilitating the AOD. The subject of this study, the design of the AOD cofacilitation, incorporated several of these research-based strategies. Little research exists on cofacilitation led by peers; therefore, the following studies shared primarily examine research on student-led, instructor-led, or student- and instructor-led cofacilitation.

Critical components to the success of AOD are the provision of clear guidelines and modeling of expectations (Gilbert & Dabbagh, 2005; Maor, 2008; Ng, Cheung, & Hew 2009; Poole, 2000) before students have assumed full facilitation responsibilities. Likewise, instructor presence is also an important predictor of successful AOD. Several researchers (Dennen, 2005; Rourke & Anderson, 2002; Wang, 2008) discovered that even when students facilitate discussion, the presence of an instructor, including when instructors employed a managerial role, positively affected the frequency and quality of feedback for the AOD. Instructor presence in AOD helps set a direction for learning and assists in enhancing participation in AOD environments.

Assignment of roles is also an important aspect for AOD success, as is evident in a study by De Wever, Schellens, Van Keer, and Valcke (2008), where they demonstrated the success of five different roles students can utilize: (1) source searcher, (2) theoretician, (3) summarizer, (4) moderator, and (5) starter. The role assignment assisted in structuring student interaction and enhancing their participation in the AOD. Hew, Cheung, and Ng (2008) also observed that summarization served as a useful activity for students, encouraging reflection about the content of the AOD. Additionally, a study by Baran and Correia (2009) showed that even when student-facilitators employed different roles, the outcomes remained similar and beneficial, too.

Research on student-led facilitation of AOD reveals many positive outcomes. For

instance, Rourke and Anderson (2002) found that the peer-led discussions fostered "better understanding of how to lead online discussion[s]" (p. 15). Hogan (2002) suggested that cofacilation allows less skilled facilitators to work with more experienced ones, reduces the stress and workload on each cofacilitator, combines the strengths, insights, and skills of each facilitator, as well as helps cofacilitators stay objective, use each other as a sounding board, and compensate for each other's weaknesses. Similarly, other researchers discovered that peer-led discussions increased interaction (Barnett-Queen, Blair, & Merrick, 2005), students' satisfaction (Swan, 2001), and leadership opportunities (Chiu, 2009). Moreover, in a study examining the factors influencing learner participation, Vonderwell and Zachariah (2005) discovered that "effective online learning requires interdependence for shared understanding of learning goals in a learning community" (p. 213). Thus, the full responsibility of learning was shared between all members of the learning community, including the course instructor and student-facilitators.

Challenges of Cofacilitation of AOD

In contrast to the benefits of cofacilitating AOD, there are several challenges. Cofacilitating AOD is not always positive for those involved (Hogan, 2002). Feeling that work is unequally distributed, meshing with different personalities, and maintaining energy for each other and the group, all contribute to the added demands of cofacilitation. Further, Hara et al. (1998) found that one of the main challenges in asynchronous online learning "is the lack of visual communication … when nonverbal cues—gestures, smiles, tone of voice—are absent, users are forced to make certain assumptions about their audience" (pp. 2-3).

Another challenge associated with cofacilitation of AOD is the balance of power. At times, the facilitator can develop an authoritative presence, which is not conducive to cohesive learning environments (Rourke & Anderson, 2002). How this takes shape during cofacilitation cannot only affect relationships between cofacilitators, but also the climate of group activity and interaction. Additionally, creating a positive atmosphere and engaging each individual in meaningful discourse is difficult. Gilbert and Dabbagh (2005) found that one of the main challenges of cofacilitating an AOD is identifying and implementing the elements of structure that positively influence meaningful discourse, and avoiding other elements that may deter. For these researchers, the elements of structure included developing facilitator guidelines, modeling good facilitation techniques, and evaluating facilitation performance.

RESEARCH METHODS

This qualitative study is an exploratory, retrospective content analysis (Schwandt, 2007) of 81 debrief statements examining lessons learned and task and role distribution resulting from cofacilitation of 1 week of an AOD. The statements were written by students in a master's level educational leadership course taught during 3 consecutive years in a U.S. private graduate school of education's online educational technology master's program. Other data were not collected or analyzed (e.g., interviews or discussion postings) because students had already graduated from the program. Moreover, this study is exploratory in that the researchers wanted to discover what they would learn from the debrief statements, which could inform future research and practice.

Context

In this study, student-facilitated AOD involved the facilitation of 1 week's AOD by a pair or trio of students. Students were asked to cofacilitate because of the instructor's social constructivist (Duffy & Cunningham, 1996) educational philosophy that students should have a role in directing their own learning, as well as collaborating meaningfully with peers.

Moreover, cofacilitation provides students with the opportunity to learn firsthand how to facilitate an online discussion, experiences most have not had, but that is essential to develop as educational technology leaders.

As cofacilitators, the students crafted the questions for discussion, fostered student communication, provided comments to foster deeper interactions, and offered positive feedback and encouragement. The student-facilitators fully assumed the role of "instructor-facilitator" by setting and monitoring the week's AOD. However, it is important to note that the instructor of the course also had a role and participated in the discussion (student-facilitators were not left without support). The ability for the instructor to "jump in" at any moment served as a low-key way to correct any misconceptions, provide encouragement, and monitor student-to-student interactions, including the student-facilitator(s)-to-student interactions.

In the course, students explored multiple aspects of power, leadership, and education. They also examined their own leadership potential as they investigated the characteristics of leadership, adult development and change, personal and technical skills, and the functions of leadership. Students completed various assignments, including weekly participation in AOD, as well as cofacilitation of 1 week of discussion. The instructor facilitated the first week's discussion to model what was expected of course facilitators.

The instructor also described that it was the team's responsibility to determine an equitable distribution of responsibilities for cofacilitating. For instance, the team may decide for its members to be responsible for different roles, dual roles, or work collaboratively on each role 100%. The roles students could consider that were shared by the instructor and developed based on cooperative learning roles (Johnson, Johnson, & Holubec, 1994), were discussion director, discussion moderator, and summarizer.

Prior to codeveloping their discussion questions, the students received a draft lecture enabling them to ask the instructor questions about the material, craft the discussion questions, and become more comfortable with the expectations for facilitating the discussion. In addition to assigning cofacilitators, the instructor also grouped experienced facilitators (those who had taken other courses in the program previously with the cofacilitation assignment) with inexperienced ones (those new to the program or who had never cofacilitated) enrolled in the course. After completing the cofacilitation of a week's discussion, students were required to coauthor a summary of the discussion and individually submit a 275-word reflective "debrief statement" describing: (1) what the individual cofacilitator learned as a result of facilitating 1 week's discussion, and (2) how responsibilities were divided up between the cofacilitators.

Data Sources and Analysis

Data utilized for analyses were 81 cofacilitation debrief statements developed by students enrolled in the course described previously. Data were collected from 29 students in 2006, 27 students in 2007, and 25 students in 2008, for a total of 81 debrief statements. To protect the identity and anonymity of the students, "<XXX>" or "<YYY>" is used anywhere that students included students' names in their debrief statements.

Researchers analyzed qualitative data using analytic induction (Erickson, 1986). Analytic induction calls for the generation of empirical assertions which are then warranted through a search for instances of confirming or disconfirming evidence. As assertions were formulated, the corpus of data was reviewed continuously to verify the validity of the empirical warrants. Discrepant case analysis was used to confirm or disconfirm the empirical assertions as they were formed. Three researchers working independently applied these methods and then compared preliminary findings, then refined the assertions based on

deliberation and reexamination of the data for confirming or disconfirming evidence.

Limitations

The study's primary limitation was that the only data analyzed included the debrief statements. This was the case since it was a retrospective study, analyzing de-identified program data previously collected. Analysis of other data from the courses, such as AOD, interviews, and grades on assignments, might have enhanced, corroborated, or contradicted the study's findings.

RESULTS

This study examined what student cofacilitators learned and how they divided responsibilities for cofacilitating 1 week of an AOD. The findings reveal that through the cofacilitation of AOD, students perceived they had:

1. gained a deep understanding of the benefits and challenges of cofacilitation of AOD;
2. further developed conceptual understanding of leadership and collaboration through the practice of cofacilitation;
3. implemented cofacilitation responsibilities through the negotiation of task and role assignments under both equal and unequal distributions of power and labor; and
4. utilized a variety of technologies to prepare for, manage, and supplement negotiation of tasks during cofacilitation.

Deep Understanding of the Benefits and Challenges of CoFacilitation

As a result of cofacilitating AOD, students gained a deep understanding of, and an appreciation for the benefits and challenges of this responsibility. Students cited: (a) time, effort, and anxiety involved in moderating discussions, (b) framing good questions for the discussion, and (c) encouraging engaged discussion, as some of the key demands of cofacilitating AOD. Consequently, cofacilitating discussions required very specific skills and traits related to collaboration; that is, cofacilitators needed to be timely, responsible, motivated, and flexible in order to plan for the cofacilitation, in addition to being diplomatic and open to frequent communication with each other to ensure positive cofacilitating experiences.

Students' reactions to managing the time, workload, and stress related to cofacilitation demonstrated that they had to balance cofacilitating duties with other facets of daily life, which also involved knowing how to manage their time. Using even transit time in airports to cofacilitate, Student #25 (2007) noted, "Flexibility and time management skills proved to be extremely important … I wanted to respond thoughtfully and ask provoking questions, which takes time and effort to do correctly." Therefore, reflecting on class members' contributions and expanding the discussion while also attempting to be timely and respectful of comments, required both time management skills and genuine effort on the part of the facilitators. The collaborative context of cofacilitating helped students address these demands, as one student shared how pleased he or she was to "be able to focus on one discussion question" because it allowed time to "reflect carefully on each person's responses" (Student #16, 2008). The method of dividing the four facilitation questions amongst themselves allowed this student to spend more time and effort provoking thoughtful discussion for a small portion of the content, rather than all four questions related to the discussion.

Shared group effort seemed to support students more for the demanding work of cofacilitation than individual effort did. Cofacilitation tasks were a means for closer collaboration and learning and a conduit to enhanced engagement in the cofacilitation process. Perceptively, motivation and commitment toward the shared responsibility of the group, were

key components to successful collaboration, as the following shows:

> All members were highly motivated to submit a quality report, prompt in responding to emails and in meeting deadlines, and respectful of each other. Although this good "fit" of team members will not occur in every group composition, the lessons of striving toward equal responsibility and workload, treating others with respect, and meeting deadlines are likely to be effective with most group efforts. (Student #8, 2007)

Not all collaborations were as successful as this one, as Student #17 (2006) described a less successful group process: "One lesson I learned this week, the hard way, is that you can never communicate too much (within reason)…it is extremely important to ensure that all the details get relayed." As this student suggested, keeping the lines of communication open and ongoing was a key component in guaranteeing that one benefits from the shared aspect of cofacilitation. The importance of this finding was underscored by the numerous times this was stated in students' debrief statements across all 3 years of data. Additionally, miscommunication, while a challenge, helped students build conflict-management skills that promoted successful group effort, as explained by Student #29 (2006):

> We had some miscommunication between <XXX> and <YYY> that resulted in <XXX> undoing what <YYY> had posted. <YYY> communicated with me on two occasions concerning how to handle the growing rift between her and <XXX>. On both occasions I suggested that she try to put behind what happened and move forward for the sake of the team. Communications improved and we were able to successfully work as a team for the rest of the week.

Even as cofacilitating mediated opportunities to reduce work related stress, collaboration itself bred its own kind of anxiety. Diplomacy and tact were important negotiation tools when misunderstanding among group members arose, especially considering they were unable to communicate face-to-face due to the online context.

Cofacilitation involved uncertainty and, for some, fear about their ability to cofacilitate a discussion, even with a partner(s). This was evident in students' reflections about how anxious they were about facilitating a week's discussion due to a lack of experience. However, an advantage of cofacilitating was the feeling of being in the trenches with another student while cofacilitating. Students were able to relate to their cofacilitator's fears and support one another while finding small ways to help each other, as is evident in the following,

> Having had to be a member of the discussion team, I have also learnt that other people might have fears the same way I do. It is essential for the success of the team to do everything possible to collaborate, support, and communicate each other. I realized that at one moment discussion was "sleepy" – the last week before the big finale must have been the cause. As a result, I try to step in to try to revive the discussion, but also to help <XXX> to gain courage to continue. (Student #26 2007)

This quote demonstrates how cofacilitators can "step in" to support teammates when facilitation becomes difficult, while also being encouraging. Cofacilitation, in the best of circumstances, entailed compensating for one another's weaknesses and building on each other's strengths. For example, a common connection students made was the link between good questions and engaged online discussions; as Student #11 (2008) explained, "since good questions are the backbone of effective group discussion, a facilitator must conduct comprehensive research about the topic and ask questions that elicit interesting responses." Some students described learning how to approach the challenge of framing better questions as a *team*, as the following quote demonstrates,

> <XXX> recommended three questions. We discussed and collaborated to hone these

questions until we were satisfied that they were ready to post… Each group member was pleased that the threads were loaded with insightful comments and examples of experiences… A team can function and work very well when all members are committed and communicate openly with each other. We had a cohesive group and the more we discussed the roles and questions, we came up with a very good strategy for management of the facilitation. (Student #12, 2006)

For this student, the process of developing the questions collaboratively involved group intellectual effort, investment in, and support for the goals and direction the AOD was to take. Open and frequent communication and shared intellectual investment demonstrated, in this case, a framework for successful and engaged AOD. In short, the experience of cofacilitating an AOD toward meaningful discussion provoked thoughtful responses about the benefits and challenges encountered by student cofacilitators.

Development of Concepts of Leadership and Collaboration Skills

As a result of cofacilitating 1 week's discussion, students reported that they were able to develop their conceptual understanding of leadership and collaboration further as they worked with their colleagues and peers, either through the experience of cofacilitating with a peer(s) or through facilitating the AOD. All of the students were enrolled in a leadership course, where course content may have led them to speculate about the qualities of leadership required during cofacilitation. Hand in hand, the students were also able to venture cogitative responses about the skills associated with collaborating with their cofacilitators.

Development of the Concept of Leadership

Several students described how the experience of cofacilitating an AOD further promoted their conceptual understanding of the

concept of leadership. Given the course content and, in some cases, role assignment among cofacilitators, it was not unusual for students to reflect on their cofacilitation experiences through the lens of leadership. However, it was not a required component for the cofacilitation debrief statements. Defining good leadership through the skills exercised while cofacilitating was common in all three courses. Some students expressed developing comprehension of the characteristics of a good leader through the practice of cofacilitation, as one student shared,

> Through this week's facilitation I learned a great deal about my classmates and what makes a good leader. In a sense, I saw myself as a leader of the conversations with the duty of guiding the conversations, but at the same time expressing myself and encouraging my classmates to do the same. (Student #2, 2007)

Here the student links facilitated active dialogue with good leadership that also created a unique condition that advanced student investment.

Many debrief statements included various lessons learned about leadership resulting from cofacilitation of the AOD. Students expressed the "great need for a single group leader who suggests actions in order to get things accomplished." As Student #3 (2007) explained, "Had there been three people trying to assert themselves and not cooperating, this project would have been a failure. Had the leadership been lacking though, no work would have been accomplished." In this instance, a description of good leadership surfaces in the need for purposeful coordination and quick initiative.

While the above student demonstrated how leadership involved successful negotiation of power imbalances to function efficiently as a team, other cofacilitating teams alternatively articulated power as being evenly distributed; for example, Student #5 (2006) described how "each of my teammates is a leader in his and her own right." Even as this student worried that shared leadership may lead to conflicts, the group "handled it with no problems at all."

Students across all three online courses imparted perceptive accounts of the importance of negotiating the delicate relationships required by cofacilitating and ways in which these relationships contributed to the development of their concept of leadership. The issue of power was also evident in disagreements involving leadership roles, as Student #1's (2006) dissatisfaction emphasizes:

> It was interesting to me how <XXX> got the project rolling by offering to be Director. I never would have put myself in a leadership position like that, because as I'm discovering in this class, one of my primary Leadership qualms is telling people to do things. (It has apparently been my habit to attempt to make team members want to do things, instead of telling them to do them.).

Thus, leadership qualities in other students were also a source of inspiration to some students. One student enthuses,

> Both <XXX> and <YYY> demonstrated great leadership initiative with proposing our plan of action for approaching the facilitation assignments as well as understanding and compromise with regard to my participation in the assignment. I very much enjoyed this group experience and have learned a lot from my peers' leadership skills. (Student #15, 2007)

As such, cofacilitating discussions crystallized important ideas about leadership. For instance, students found that good leadership developed from having a sense of ownership and investment in the practice of facilitation. It also required purposeful coordination, quick initiative, and a deep understanding and tolerance for the different perceptions of leadership and the corresponding distributions of power involved. Thus, the experience of cofacilitating discussions provoked complex ideas about the nature of leadership.

Developing an Understanding of Collaboration Skills

The cofacilitation experience paired students in groups of twos or threes that required intensive collaboration. Students had to build working relationships in a short period of time, distributing work evenly among themselves, as they strived to maintain respectful community and leadership of the AOD throughout the process. Frequently, students labored to maintain this balance between good relations and getting the work done. This led to collaboration patterns that ranged from negotiation of cofacilitating tasks through prolonged and open communication so as to maintain equal input and investment throughout the cofacilitation week, to division of cofacilitating roles and responsibilities independently among cofacilitators who concluded their activities in the usually shared task of summarizing discussions. Often the result was complex with some cofacilitators putting in more effort than others, and group work becoming a careful manipulation of relationships online.

Individual students had to learn how to work with peers who had different styles, to function positively as cofacilitators, even if their styles did not mesh. Despite this challenge of working in a group, students learned how to draw the best out of their teammates and when to compromise. Likewise, students also had to collaborate with teammates with different worldviews. Student #3 (2008) explained how different perspectives among cofacilitators added to dialogue and learning, "Sharing discussion leadership with a colleague of a different background enabled us to offer feedback from very different and distinct points of view."

Although some cofacilitators developed collaboration skills through disharmony in their cofacilitation styles, many other cofacilitators worked together seamlessly, with group members described as "committed" and group work involving lots of open communication. Many students described their teams in positive ways, such as Student #12 (2006) whose group was described as "cohesive." For this student groupthink was positive and that, in turn, facilitated ease in negotiating roles and questions. However, not all students conceptu-

alized collaboration in affirmative ways, as a quote by Student #2 (2006) demonstrates,

> I have found that I prefer a more masculine communication style. I prefer groups that are able to work independently as individuals and then come together to collaborate. I do not like working together as a group to come up with a plan, instead I prefer to have individuals come up with plans and then discuss among the different options the best solution. I have learned a lot from working in groups, this group was a great experience.

Clearly, students find various ways to collaborate which leads to different conceptualizations of good collaborative techniques. Thus, for most students, successful collaboration necessitated cofacilitators who were positive, fostered open communication, and organized their roles in ways that worked well for all involved.

Negotiation of Cofacilitation Responsibilities

Students negotiated cofacilitation responsibilities in a variety of ways. Some agreed on responsibilities through task and role assignments described by the instructor. Most strived for equal division of labor and total collaboration (while not always achieving these goals) in addressing the responsibility of cofacilitating the AOD. The cofacilitation responsibilities involved several different tasks described in earlier sections. Therefore, cofacilitators had to determine among themselves who would do what and when.

Task and Role Assignment

Many of the students in the three courses divided the responsibilities for cofacilitating the AOD by assigning tasks and roles among themselves. However, these negotiations varied in implementation—students distributed work in terms of tasks associated with facilitation or by assigning roles to each cofacilitator.

Underscoring the distribution of responsibilities was a common ethic of fair distribution of labor. The following excerpt shows how a "task assignment" approach was used:

> For our team facilitation this week, responsibilities were divided equally among the three of us. As a team, we decided that each of us would craft a single question, based on the week's reading assignments, and post our individual questions to Blackboard. We then maintained responsibility for both facilitating and summarizing our own individual question for the week. (Student #3, 2006).

In this instance, students negotiated equal distribution of cofacilitation tasks to facilitate balanced conditions of collaboration and independent work. Others utilized a collaborative approach for managing facilitation tasks, as the following emphasizes: "We also agreed that we would both pitch in to summarize the facilitation.… Throughout our facilitation we both tried to engage each student in the discussion" (Student #7, 2008). Hence, how students negotiated their responsibilities relied very heavily on their tolerance for group work and collaboration versus their preference for independent work.

Other students distributed responsibilities by taking on different roles described by the instructor, which included discussion director, discussion moderator, and summarizer. These students recognized the need for leadership and direction through the assumption of specific roles, while also acknowledging the necessity for more shared labor than the roles would dictate in their specific situation. The juxtaposition of the need for leadership against the necessity for equal power relations was a common group challenge, and one that cofacilitators likely negotiated for all of the required cofacilitation tasks. Groups that conceived of leadership as shared, disputed the power relations inherent within the role assignments, and found ways to resolve any issues by assuming a combination of roles instead of just one. For example, as Student #24 (2008) described,

Instead of a horizontal division of discussion director, discussion moderator, and summarizer, we liked a vertical division. Each of us would choose his/her own question(s), be the moderator for the question, and finally summarize his/her individual discussion thread. It was felt that different moderators might make for a more interesting discussion because of our different perspective. In addition, we felt each person could write a better summary about his/her discussion thread.

In the above case, the students worked collaboratively but independently to ensure successful cofacilitation that valued the diverse perspectives of each cofacilitator. Although students reported adopting divergent ways to tackle the tasks and roles they would undertake, it was clear that they had to reach consensus, and often negotiated these roles and/or tasks to maintain equal effort and responsibility across group members.

Equal and unequal division of labor. Across the cofacilitating teams, students explicitly reported either equal or unequal divisions of labor. Most students described instances of "equal" distributions of responsibilities rather than unequal ones, as illustrated in the following quote:

> [We] equally divided the responsibilities of creating questions, facilitating discussions, and summarizing content. To begin with, we bounced potential questions off of each other and, having selected the best of the litter, I posted them early Wednesday morning. For the most part, we both hawked over our questions, making various comments and questions. After agreeing on a summary format, we worked together to summarize posted content—which was also divvied up according to our original area of responsibility. (Student #7, 2007)

This quote highlights a positive experience in sharing the workload between cofacilitators. However, not all cofacilitation team members responded feeling as if all members contributed equally. For some, the role divisions entailed assigning work to teammates and fol-

lowing up with them to ensure work completion, which could be challenging, as the following student shared, "It was not always the easiest thing to tell someone that they are not contributing to the group effort as much as I had hoped" (Student #15, 2006).

The demanding experience of cofacilitation fostered collaboration and a shared investment in tasks involved, but frequently it also entailed weak efforts on the part of some due to busy schedules, high work demands, or facilitating weaknesses in the online medium. One way of countering the challenges of dividing the labor equally was addressed by Student #18 (2006):

> I feel best when teammates work with me rather than arbitrarily divide the responsibilities for the week. I never felt that I was taking on more of the responsibility than my teammate because he was with me participating in all the activities that I was completing. However, in the past when I have facilitated discussions, I have worked jointly and have divided the responsibilities. The times when I have divided the responsibilities, I have felt that I have ended up actually doing more than my teammate. By working side by side, I have felt as though my efforts were equaled by my teammate.

In this example, it seems that the student preferred sharing the various responsibilities of cofacilitating rather than dividing up responsibilities, to ensure more equity in the distribution of responsibilities.

Use of a Variety of Technologies

Students used a variety of technologies to negotiate the tasks involved in cofacilitating discussions. The most popular technologies students described using were communication and collaborative tools like e-mail and/or Google docs. The only exception to this was Google Talk (but only in the course taken in 2008—perhaps when the tool became more available/popular).

Students used e-mail, primarily, to communicate and determine the management of cofacilitation responsibilities and roles. They reported utilizing this as a venue to exchange ideas about how to collaborate, what tasks to perform, and how to assign these tasks in an equitable manner. In many cases, students contacted their cofacilitators well in advance of their cofacilitation responsibilities. For example, Student #2 (2008) e-mailed her or his group "a week and a half before our scheduled discussion" to ask "how the team would like to conduct the discussion." Early preparation was not the norm, however, as some students struggled to deal with communication issues, as Student #28's (2006) case shows:

> The sharing of phone numbers is vital. I was stressed out until 8 o'clock this evening because <XXX> had not answered my Emails since Wednesday morning and I had no other way to contact her.

Such instances necessitated the use of diverse communication tools to keep the "lines of communication" open. The benefits of cofacilitation become a moot point when in contention with poor communication and collaboration.

Students also used Google docs, an online, collaborative tool for writing the week's summary of the discussion. For example, one student explained: "We each contributed our ideas as to how to set up our summary document, and <XXX> jumped in and developed a common sharing space on Google docs so that we could collaborate and work using a common document" (Student #3, 2007). The use of Google docs assured the synthesis and archival of key themes from the group discussion via cofacilitator collaboration. Based on the debrief statements, it seems to have been a useful tool to synthesize and summarize individual summaries written by cofacilitators.

Although e-mail and Google docs were referenced as the most frequently used tools for cofacilitation, in 2008, several students described using Google Talk to communicate directly with teammates. As Student #11

(2008) delineated, "Since both of us live in the Middle East, we decided to facilitate all the discussion threads together and contact each other through Google Talk to make quick decisions when needed." The use of instant messaging applications to make quick decisions in addition to relying on other asynchronous means of communication reinforced the "co" aspect of cofacilitating. Multiple means of communication ensured that students communicated and collaborated in different ways, as well as applied different responses to challenges of cofacilitating online. As evidenced by the students' debrief statements, technology helped mediate and diversify communications between cofacilitators, enhancing the ways in which students collaborated and negotiated their roles and tasks as AOD cofacilitators.

DISCUSSION

This exploratory qualitative study examined what graduate student cofacilitators learned and how they divided responsibilities for cofacilitating 1 week of an AOD. As previously mentioned, little research exists on student-led facilitation of AOD (Hew & Cheung, 2008). Findings show that the students who cofacilitated an AOD learned about the benefits and challenges of cofacilitating AOD, further developed their understanding of the concept of leadership and cultivated collaboration skills, figured out the different tasks and role assignments between them, and utilized a variety of technology to prepare for and manage the AOD.

Students' debrief statements describing their experiences cofacilitating with one or two peers elicited two overall conclusions about the practice of cofacilitation: (1) there are both benefits and challenges associated with cofacilitation online, and (2) cofacilitators develop a better understanding of what leadership and collaboration mean through cofacilitation of an AOD. These learning experiences and associated interactions, however, were not isolated from the influence of "structuring narratives"

(De Wever et al., 2008). Students frequently used the instructor's guidelines on equitable distribution of responsibilities to negotiate, sometimes reinvent, and implement their roles and responsibilities.

Several key demands of cofacilitation emerged—they were that the time, effort, and anxiety involved in moderating discussions, framing good questions for the discussion, and encouraging engaged discussion. However, underscoring all of these demands was the added challenge of having to collaborate with a cofacilitation partner on all of these activities. Reinforcing the literature, students' reports suggest that cofacilitation, indeed, helped lower the stress, anxiety, and workload related to facilitating online. As Hogan (2002) suggests, working with partners in the planning and execution of cofacilitation responsibilities can assist individual facilitators to question their own perspectives and develop better facilitation questions. Navigating the difficult world of online communication, these cofacilitating partners also sought to collaborate in ways that enhanced their own investment and participation in cofacilitating, which they, like Swan (2001), linked to successful and engaging AOD.

How students managed these artful and, sometimes, delicate negotiations frequently involved the instructor's guidance on roles and related responsibilities, which also played an important role, and substantiated that line of previous research. However, most students, being primarily concerned about equitable distributions of the labor, engaged in discussions that sought to think about and approach the assigned roles in a manner that ensured equal divisions of labor, power, and leadership. This meant that how cofacilitators negotiated their responsibilities relied very much on how they collaboratively conceived of leadership, as well as their tolerance for group work and collaboration, versus their preference for independent work. For some groups, the need for leadership was strong, mirroring discussion on the need for instructor presence in the literature (Dennen, 2005; Gilbert & Dabbagh, 2005;

Maor, 2008; Poole, 2000; Rourke & Anderson, 2002; Wang, 2008). For other groups, collaboration took precedence over leadership, as students put a premium on interdependence and sharing the learning goals (Vonderwell & Zachariah, 2005), which also exemplified constructivist learning practices (Maor, 2008; Poole, 2000; Rourke & Anderson, 2002; Rovai, 2007).

The second major finding distinguishes itself from being typified as a benefit of cofacilitation because students did not only report that they learned how to become better leaders or how to collaborate well via cofacilitation responsibilities. Rather, they attempted to define what appeared to be good leadership or high-quality collaboration in their debrief statements. This could very well have been the result of students reflecting on the course content via the practice of cofacilitating. Nevertheless, their definitions were varied and complex, and crystallized from former perceptions, structured narratives, and coconstructed understandings from their cofacilitation experiences online. Therefore, students likely formed both theoretical and practical knowledge of cofacilitation through the practice of cofacilitating AOD.

Finally, students used diverse learning technologies in order to address different aspects of the roles and responsibilities associated with cofacilitating AOD. In order to discuss and bargain around roles and responsibilities, most students used e-mail to communicate. For quicker decision making, students from the 2008 sample, used Google Talk, an instant messaging system. For summarizing the AOD, students utilized Google Docs, a collaborative online writing tool that helped cofacilitators organize and synthesize key ideas together, enhancing as Cheung et al. (2008) point out, reflection and critical thinking. Employing such tactics and tools enabled students to communicate and collaborate much more effectively than otherwise possible. Moreover, such information about the technologies students used to manage cofacilitation of AOD could be useful for instructors and programs to examine

so they can better support their students when engaging them in such constructivist learning activities, orientation activities, or preparing them to cofacilitate AOD.

The findings of this exploratory study might inform future efforts by others involved in designing AOD cofacilitated by students. They can also be used to assist instructors and students of online learning to understand the value of student cofacilitation of online discussions for improving student learning of content, as well as AOD and group learning skills, even though the ways in which responsibilities are divided might vary from group to group. Finally, information gleaned might help online instructors better prepare students for cofacilitating AOD.

FUTURE RESEARCH

Suggestions for future research include:

1. investigating the division of labor (task distribution) and roles (e.g., leader, moderator, summarizer) and the benefits/challenges to students undertaking these;
2. examining students' feelings of anxiety facilitating AOD, strategies to ameliorate negative feelings, and the positive and negative effects on student learning;
3. conducting quasi-experimental studies focused on student achievement, interactivity, and participation levels comparing instructor-led and student-led AOD; and
4. researching which types of technology facilitate preparation for and management of the facilitation of AOD.

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