

Chapter 6

Case Studies on Peer Facilitation: How to Sustain Participants' Online Discussion?

In the previous chapter, we highlighted several findings on some possible ways to increase student contribution in peer facilitated online discussions. However, another question that should also be asked is what makes an online discussion sustainable. To address this question, we conducted the following three studies that examined the growth of discussion threads. The first study examined thread development patterns, while the other two studies examined, in greater detail, the role of questions as well as other facilitation techniques that could foster the continuity of threaded discussion over time.

We are interested in studying thread sustainability because of the relationship of online discussion threads to social constructivist learning (Hewitt 2005). The social constructivist learning perspective suggests that individuals learn by exchanging ideas or opinions with one another. In order for this to take place, sustained online discussion, typically characterized by long threads, should ideally be the norm because it typically takes many exchanges of postings for students to share viewpoints, explore different perspectives, negotiate issues, and create mutual understandings (Guzdial and Turns 2000; Hewitt 2005).

6.1 Examining Thread Development Patterns

Study 5

Study 5 was conducted to address the following two major research questions (Chan et al. 2009): (a) what patterns characterize the growth of AOD threads? (b) how does the practice of peer-facilitation techniques affect thread development?

Method

The context of study was a graduate level (Master) course entitled *Designing Asynchronous Online Discussion*. This course introduced students to the advantages and disadvantages of using asynchronous discussion as an instructional strategy, the

principles of designing asynchronous discussion, as well as methods of facilitating and evaluating the discussion. Fourteen students initially attended the course. One student, however, dropped the course due to work commitment soon after it began.

Each student was required to design a lesson incorporating the use of asynchronous discussion. Each student was given his or her own discussion forum in BlackBoard. After the students had designed their lesson plans, they posted them in their respective forums. Each student became the owner and facilitator of his or her own discussion forum. The forums provided students the opportunity to give comments, suggestions, or ask questions about each other's lesson plan. Altogether, the online discussion ran for 3 weeks. Data were gathered from students' discussion posts, reflections, and interviews.

Students' discussion posts were examined to identify the growth pattern of discussion threads. Discussion forums with a higher number of postings were selected because such forums would most probably show the growth patterns of thread over time as compared to forums with no or few postings. Since the mean number of postings per student for the class was 21.2, only those discussion forums with more than 21 postings were selected and the structure of the threads was examined. Content analysis was used to analyze how the practice of facilitation techniques shaped the growth patterns of threads over time. Two raters coded the student facilitators' techniques separately. Any discrepancies of the coding were discussed and negotiated until a 100 % mutual agreement was reached.

Main Findings of Study 5

An examination of the growth patterns of threads over time pointed to three typical thread patterns: short thread pattern, extended thread pattern, and split thread pattern (see Fig. 6.1).

A short thread pattern suggests that a sustained discussion is not taking place because it contains only two postings—the starter note and a reply to the starter. The formation of an extended thread pattern, on the other hand, typically suggests that peer facilitators and participants are engaged in a sustained discussion involving a single idea or issue within a particular discussion topic. The formation of a split thread pattern also suggests that the facilitators and participants are engaged in a sustained discussion but they are involved in two or more ideas or issues that are posted in at least two subthreads. Further analysis of the data suggested the following findings.

6.1.1 The Mere Number of Peer Facilitator Postings Appears to Have No Influence. Also Avoid Trying To Resolve Differences Early

The mere number of peer facilitators' postings per se did *not* necessarily have the effect of sustaining the online discussion. We also found that lengthy messages tend to dissuade people from continuing a discussion. For example, an examination of peer facilitator Gwen's postings revealed that Gwen's messages tended to

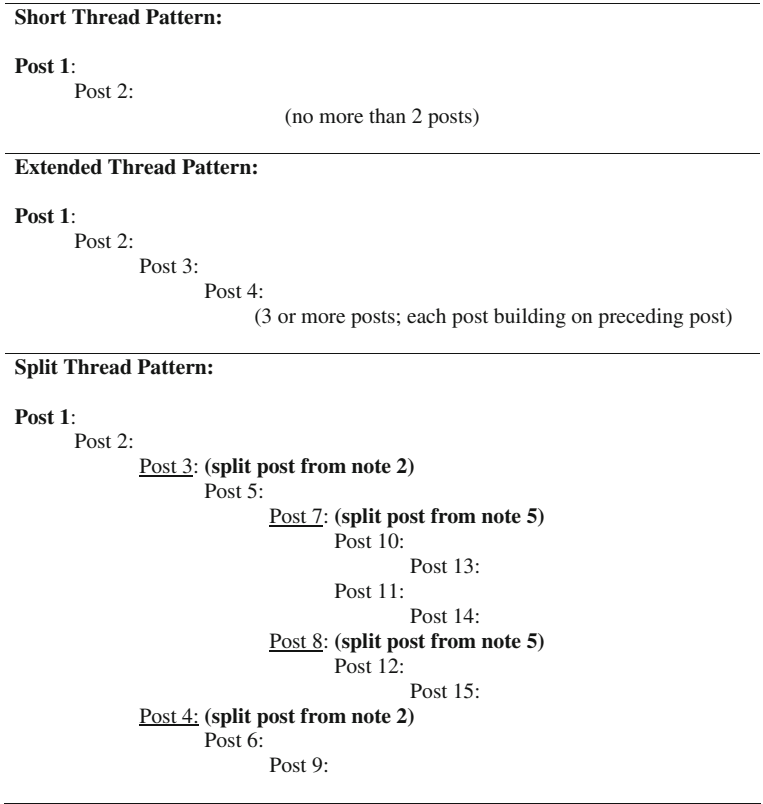


Fig. 6.1 Types of thread pattern

be too lengthy (e.g., mostly about two-thirds of a page for each reply to other participants), suggesting that this might have discouraged other participants from reading and responding in return. Results also suggest that peer facilitators who attempt to resolve differences and conflicts in opinions early in the discussion tend to foster thread termination because it signals to other participants that a decision has been made and thus further discussions are not necessary. On the other hand, the application of questioning technique appears to continue the discussion most of the time.

6.2 Investigating the Role of Questions and Other Facilitation Techniques

From Study 5, we learned that the use of questions appear to promote thread continuity. However, Study 5 did not elaborate on the types of questions and how they might affect thread sustainability. We therefore conducted two additional

studies to examine the role of questions in greater detail, as well as other facilitation techniques that could sustain an online discussion. Table 6.1 provides a summary of the two studies. Each of the two studies will be described first, followed by a cross-case discussion of the main findings.

Study 6

The purpose of Study 6 was to examine the facilitation techniques employed by peer facilitators to sustain an online discussion (Hew & Cheung, 2008).

Method

Twenty-four students, who were enrolled in a post-diploma course in Instructional Technology, participated in the study. The course was a blended one involving face-to-face and asynchronous online discussion sections. All 24 students had the opportunity to be facilitators and participants in the online discussion. Three topics of online discussion were discussed, each topic lasting one week. The first topic of discussion was “How can teachers implement information technology tools to engage student learning?” The second topic of discussion was “How can information technology tools be used to facilitate problem-based learning?” The third topic focused on “How technology tools can be used to address different students’ learning styles?”

There were four groups of students, with six members each, in each discussion topic. In each topic of discussion, the students were randomly assigned into the four groups and two students were randomly chosen as peer facilitators. Students who served as facilitators before would not be chosen as facilitators again. After the online discussions had ended, each student wrote a reflection which required them to: (a) state four facilitation skills that they used in the online forum and explain why they applied them in those instances, and (b) identify three different facilitation skills that students learned from their peers.

Students’ online posts were examined to identify the extent to which the discussions were sustained. We considered a thread to have a sustained discussion if it had a depth of at least six levels of message posted (see Fig. 6.2).

Content analysis was used to analyze the peer facilitators’ online posts to examine the facilitation techniques used. Specifically, the online posts were examined via the constant-comparative method to build emergent and initial data categories of facilitation techniques (Lincoln and Guba, 1985). The inter-rater reliability of the coding was 92 %.

Study 7

In order to further explore the research question on what factors may sustain student discussion in peer-facilitated online forums, as well as to confirm the findings in Study 6 we carried out Study 7 (Ng et al. 2009). Sustained discussion is defined in this study as discussion threads which are at least three levels deep.

Method

The context of Study 7 was a graduate level course which introduced students to the principles of effective multimedia design. Sixteen students attended the course. The multimedia course was an intensive one that was conducted over 4 full

Table 6.1 Characteristics of Studies 6 and 7

Characteristic	Study 6 (<i>n</i> = 24)	Study 7 (<i>n</i> = 16)
Mode of learning	Blended with face-to-face and online components	Blended with face-to-face and online components
Discipline of study	Education	Technology (multimedia design)
Type of online component	Peer-facilitated asynchronous online discussion	Peer-facilitated asynchronous online discussion
Online task	Discussion task (3 topics)	Design task
Duration of online discussion	3 Weeks long	4 Weeks long
Discussion requirement	Course credits given for contribution in the discussion; however, no number of posting quota or deadline imposed. Students randomly grouped into four groups of six members each, each handling a specific discussion topic.	Students were not given any credits for their postings. No number of posting quota or deadline imposed. Students were free to post in whichever forums they wished.
Profile of students	Full-time post-diploma students	Part-time graduate students
Data sources	Online posts	Online posts, questionnaire, interviews

days. The first 3 days were held on consecutively, while the last day of the course was held one month later. During the first 3 days, students were taught multimedia principles and concepts and worked with a partner to come up with a draft project proposal and storyboard for a multimedia product. The students then uploaded their project proposal and storyboard to an online discussion forum after the third lesson.

The instructor created one discussion forum for each pair of students to upload their project proposal and storyboard for peer critique. The students facilitated their own forum and received feedback to improve their project plan and storyboard. Although the students worked in pairs, only one of them facilitated the forum. It was up to the pair to appoint who the facilitator should be. This meant that 8 out of the 16 students in the course were peer facilitators and hence there was a total of eight peer facilitated asynchronous online discussions for this study. However, all students in the course were expected to participate in all the other discussion forums. The students had the freedom to choose to contribute in whichever discussion forums they wished. The asynchronous online discussions ran for about 4 weeks. The students were not given any grades for their postings in the asynchronous online discussion. Data were gathered from students' discussion posts, questionnaires, and interviews.

Thread	Author
Engaging student with online forum:	HLT
RE: Engaging student with online forum:	SH
RE: Engaging student with online forum:	SSI
RE: Engaging student with online forum:	TH
RE: Engaging student with online forum:	CWS
RE: Engaging student with online forum:	CL

Fig. 6.2 An example of a six-level deep discussion thread

Main Findings of Studies 6 and 7

In this section, we offer the following four major findings from the aforementioned Studies 6 and 7 with regard to the possible ways of sustaining student contribution in peer facilitated online discussions.

6.2.1 The Use of Questions Appears to Sustain the Discussion

The earlier results from Study 5 suggested that the mere number of peer facilitator's postings per se did *not* necessarily have the effect of sustaining the online discussion. On the other hand, the application of questioning technique appears to continue the discussion. Specifically, what types of questions are useful? Based on the results of Study 6, two types of questions appear to foster seven- or more-level deep threads: (a) questions about other people's opinions, and (b) questions of clarification. An example of the former is, "Do you think it is feasible to use ICT tools to teaching attitude change?" "If yes, how can it be done?" An example of a question of clarification is, "In your previous post, you mentioned that you drew the images on Paint and put them together. Can you clarify, would it be a static single scene, or did you intend to come up with a movie clip?" Asking questions of clarification helps to clear up ambiguous points, keep the discussion focused, and assures participants that they are on the right track which gives them more confidence to continue to contribute.

In addition, Study 6 suggested that questions should be posed toward the end of a post rather than in front. Posing questions *later* rather than earlier appears to foster a greater sense of obligation on the part of the participants to reply to the questions; hence increasing the odds of sustaining a discussion.

6.2.2 Encourage Peer Facilitators to Convey Sincere Appreciation for Other People's Contribution

Showing appreciation for other people's contributions appears to *both* encourage individuals to contribute as well as sustain a discussion. However, as noted in the

previous chapter, participants have to show sincerity in their appreciation. In Study 6, we found that showing sincere appreciation may foster seven-level deep threads which suggest the possibility that the discussion is sustained or extended. A representative example is, “Thanks H for your concise and quick response. Your comments made me reconsider my prior assumption about the target audience, which may not be entirely valid.”

Analysis of the data revealed that showing appreciation attracted and sustained student contribution in a discussion because it made students feel that they were worthy contributors; that their contributions were deemed important enough to be noticed. For example, Ashley, a participant explained, “Acknowledging participants’ contribution aids in encouraging discussions as it ensures that the participants of the forum obtain the satisfaction that their views have been taken note of and this fosters further discussion”. This was echoed by another participant, Nick, who explained:

The student facilitator’s posts tended to start off with a brief appreciation to individuals who contributed. This, I felt, led to a general feeling of infectious warmth within the forum and a subsequent desire to share even more. This uplifting and encouraging tone could be the main contributory factor to why I was the most active participant in the discussion.

6.2.3 Refrain from Citing Sources Too Often

To sustain discussion, participants should perhaps refrain from citing or quoting sources too often to support their initial ideas. In Study 7, we found that citing sources too often could be interpreted by other participants to mean that further suggestions are not welcome because it sounds condescending. For example, Wong, a participant, explained, “I tend to respond to questions which ask for opinions, rather than to those that quote certain sources of experts. For example, according to so-and-so, it should be ” Another participant, Soh, remarked, “If the person quotes from somewhere very often, it sounds condescending.”

6.2.4 Show Openness to Feedback

One way to show openness to feedback is to explicitly encourage participants to contribute. There are two ways by which this could be done: (a) general invitation, and (b) personal invitation. In the former, a message is posted to all participants inviting them to contribute in the discussion. A representative example would be, “Dear/Hi all would appreciate your thoughts about this plan/issue.” When a peer facilitator encourages people to contribute, the participants generally feel that he or she is open to their suggestions and welcome feedback. For example, Kathy, a participant, said, “When the facilitator encourages all members to participate, I feel that he/she welcomes feedback and is open for comments.”

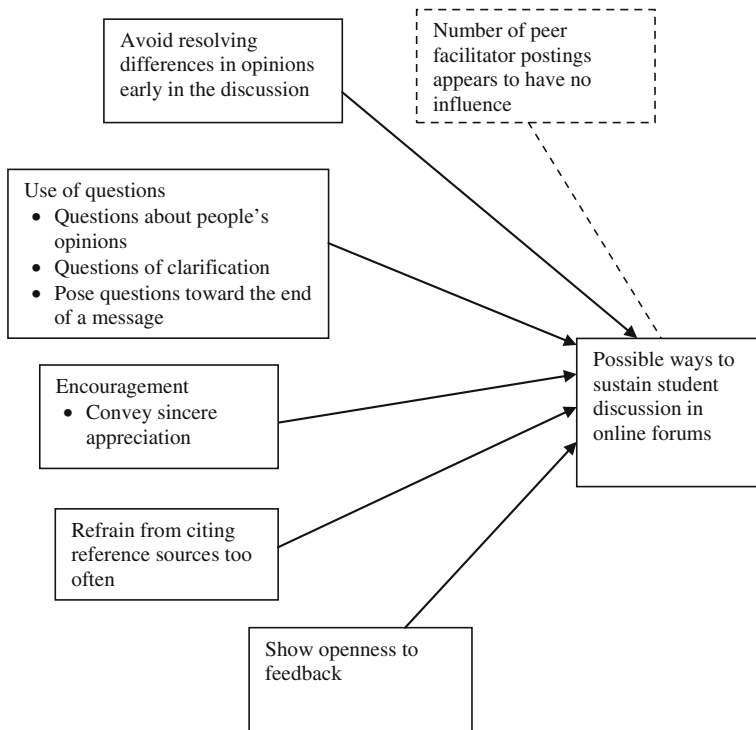


Fig. 6.3 Major findings regarding possible ways to sustain student discussion

On the other hand, some peer facilitators may specifically invite certain individuals to contribute. For example, “Hi G and E, could you share your views on this issue?” John, a participant, explained, “If the facilitator personally invites me, by name in asynchronous online discussion, I feel obliged to help.”

However, it is important to note that while this strategy could encourage contribution from certain participants, it could backfire and put off others whose names are not stated in the online post. For example, Cindy, a participant shared, “When the facilitator addresses his responses to the one who posts the message, I’m sometimes not sure if I should come in and answer. I feel that I am intruding into their discussion.” Another participant gave hint to a possible solution to overcome this problem. This participant, Koh, mentioned that if the peer facilitator ended his posting with “What about the rest”, he would try to contribute because this signaled that comments and feedback from other participants were welcomed as well. Another possible solution is to send personal e-mails or short messages (SMS) via phone directly to specific participants to invite them to contribute.

Recipients should also show openness to feedback by suspending judgment and not harshly criticize or put down any ideas. An individual’s contribution such as ideas and comments is a very important component of his or her self-efficacy and personal self-image (Wasko and Faraj, 2000). Refraining from harsh criticism

helps reduce the possibility that an individual student's personal self-image is being threatened because attacks on an individual's contribution, which are typically viewed as attacks on the individual itself and destroys future contribution, are minimized.

Figure 6.3 summarizes the major findings of Studies 5, 6, and 7 on some possible ways to sustain student discussion in online forums.

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