



Positioning university students as leaders of the learning process within a peer e-learning environment

Neil Harris

School of Public Health
Griffith University

Maria Sandor

School of Life Sciences
University of Skövde

Capacity and interest in the use of computer conferencing techniques, such as online discussion forums, remains modest amongst most academics. This paper offers a conception of the online discussion forum as a framework that encourages student centred peer e-learning. In particular, it presents research findings on the experience of university students as leaders of the learning process as a central element of this approach to discussion forums. Data were collected through semi-structured interviews with students. The findings provide insight into how students view the approach and indicate it represents a workable means to position students at the centre of an online peer learning experience. Such an approach will be of interest to academics who want to incorporate computer conferencing techniques into their teaching and maintain meaningful peer learning opportunities for their students.

Keywords: discussion forums, student centred e-learning, forum facilitation

Background

There is a growing appreciation of the value of incorporating student-to-student learning opportunities to enrich the learning process and deepen learning (Boud, 2001). Recent research investigating peer learning has reported it “provides an autonomy-supportive environment that fosters independent thinking” (Tien, Roth & Kampmeier, 2002, p. 619) and is useful in improving “knowledge acquisition, skill development and personal growth attributes” (Heaney et al., 2006, p. 3; Johnson, 2006). There is also a growing interest in incorporating computer-mediated communication (CMC), in particular computer conferencing (Garrison, 1997; Rourke & Anderson, 2002), in delivery of university curricula (Tallent-Runnels et al., 2006). The distinctive asynchronous platform provides a means to combine the use of CMC with the promotion of peer learning (Harris & Sandor, 2007; Kear & Heap, 2007). However, even though there has been a substantial increase in the use of CMC within the sector knowledge and skills of its use, let alone how to use it to create meaningful peer learning opportunities, remains modest amongst most academics (Stodel, Thompson, & MacDonald, 2006).

Discussion forums as context for peer e-learning

While much of the usage of computer conferencing, more specifically online discussion forums, is didactic in format and positions the academic at the centre of the learning process, discussion forums can provide a means to promote student to student interaction (Harris & Sandor, 2007; Kear & Heap, 2007). Considering the recognised benefits of peer learning coupled with the availability of asynchronous discussion forums, initiatives that secure greater student involvement and positions them as central in the e-learning process are needed. Figure 1 presents a model of the discussion forum as a student centred peer e-learning environment. It positions the student, as content expert and facilitator on a specific topic, at the centre of the learning event and the instructor as the overseer to offer support and guidance as required. Such a conception shifts the focus of learning from the instructor to the student. Students take turns as content expert and managing discussions. A short essay or primer is prepared and posted by the nominated student as the start point for discussion. Research on students as online discussion facilitators

has suggested this approach is beneficial for both student involvement and learning outcomes (e.g. Rourke & Anderson, 2002). Yet, there remain some concerns as to the appropriateness of the student as facilitator related to level of content expertise/knowledge and standing amongst peers (e.g. Harrington & Hathaway, 1994; Rourke & Anderson, 2002). This approach largely resolved these issues, as it positions the nominated student as the content expert with greater knowledge on the topic compared to his or her peers.

The framework has been developed over the past six years as a central component of two postgraduate masters level courses delivered in both blended and online modes through the Blackboard virtual learning environment. Within these courses, discussion forums run weekly with set topics aligned with weekly content. Students are assigned a topic and are assessed on their primer (30% of course grade), the facilitation of the discussion (10%) and their postings (30%) in discussion forums. Students are provided with information on discussion forum facilitation including what is expected of them when they are placed in this role. All forums are timed allowing students access to the forums for a limited period, usually two weeks per forum to compress the discussion period and create momentum within the dialogue. Overall, anecdotal and course evaluation feedback from students has been very supportive. A research project to examine this approach to online discussion forums was undertaken in 2007-2008. The purpose of this paper is to share findings about the experience of students as leaders of the learning process within this conception of the online discussion forum.

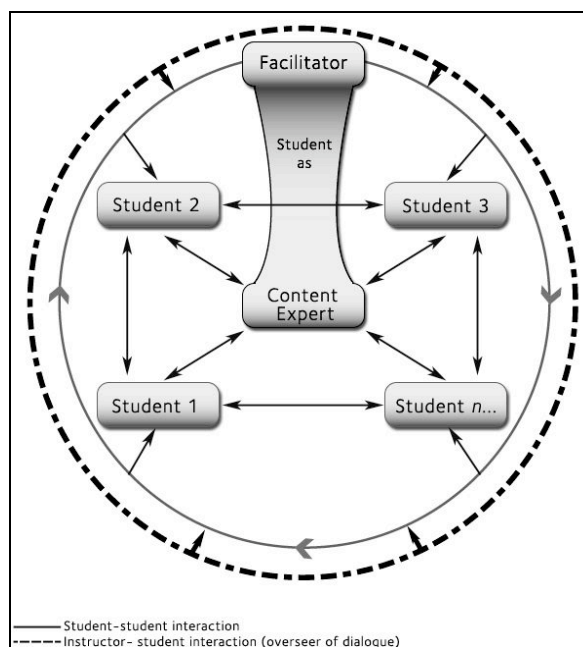


Figure 1: Online discussion forum as a student centred peer e-learning environment

Method

Data were collected through semi-structured interviews with open and closed ended questions. The closed ended questions were five point Likert-style questions with response categories ranging from strongly agree through neutral to strongly disagree. To qualify the explanation, open ended questions were asked about the framework. The questions relating to facilitation were divided into the week the student facilitated the discussion and the weeks where fellow students facilitated the discussions. Questions were asked about sufficient knowledge, confidence to lead and ability to facilitate discussion.

The research sampling frame was students enrolled in the two courses where the framework has been utilised. Students received invitations to participate by email and information about the study was also posted on the course websites. Out of the 31 students who were asked to participate in the research 20 students agreed to take part. Interviews were conducted either face to face for internal students or online for external students (Griffith University Research Ethics Protocol No. PBH/21/07/HREC). The closed ended questions were analysed with descriptive statistics (mean and percentage). The open ended questions were transcribed with responses clustered under the five themes set out in the data collection instrument.

Results and discussion

Findings relating to the week the student facilitated the discussion

Table 1 displays the breakdown of participant responses to three questions about the week the participant posted the primer and facilitated discussion. A majority of the students (75 %) agreed (A) or strongly agreed (SA) they had sufficient knowledge on the topic the week they facilitated the discussion. Most students felt confident to lead discussion (80 % A or SA) and able to facilitate discussion (75 % A or SA). These results indicate the majority of students had a positive experience and felt capable to undertake the forum facilitator role.

In support of these results, in response to an open ended question relating to participant experience as facilitator, one student commented:

Understanding the topic and collecting proper material for the topic and going through it makes me get sufficient knowledge. Once I understand ... the topic, it gives me the confidence to lead the topic. Comparing and contrasting my ideas with others help me to facilitate the discussion.

Table 1: Student experiences of being a discussion forum facilitator

Question	SA	A	N	D	SD
I felt I had sufficient knowledge on the topic	15%	60%	10%	15%	0%
I felt confident to lead discussion on the topic	15%	65%	5%	15%	0%
I felt able to facilitate the discussion on the topic	20%	55%	15%	10%	0%

Response in percentage, $n = 20$.

SA = Strongly agree, A = Agree, N = neutral, D = disagree, SD = strongly disagree

The quantitative data indicated that the majority of the students felt able to lead forum discussion. However, the open ended questions revealed diversity within the participants about their experience. Some students indicated they found the facilitation role easy:

I never had problem with getting people involved in the discussions
I had done the research on that specific topic and felt that I could lead a discussion.

In contrast, students also indicated there were difficulties associated with being the facilitator, concerns were voiced from some students about the nature of some posts:

It was difficult sometimes to facilitate a discussion, some postings were difficult to take further
Some postings were making statements and not discussing that much, some would post a comment with references and that's final

These quotes suggest facilitators were at times confronted with postings that were not in sync with the discussion thread. In these cases it may be that the posts were not in the "spirit" of a discussion but more about meeting assessment requirements to post to all forums. Some of these more difficult posts may have been about meeting assessment requirements to participate in all content forums rather than actually *participate* in discussion on the topic. Yet, this finding also identifies some respondents may have struggled with what the facilitation role necessitates within the context of the online discussion forum.

One issue widely reported by students was time delay between postings, making facilitation more difficult and at times frustrating, for example:

It is not easy to facilitate, for example you post your primer today say Tuesday, then no postings Wednesday, Thursday, Friday even Saturday. Then the forum is about to close the next week.

It was spread out over a long period of time as a few people were slow to post comments.

These quotes suggest that while the forums were opened for a specific time period (approximately 2-3 weeks) to create momentum within the dialogue, students were still concerned and frustrated when their peers responded slowly to the posting of the primer or postings were sporadic. These concerns may in part be related to the facilitation role being part of assessment and hence facilitators wanting to have sufficient time and opportunity to demonstrate their commitment and secure available marks. Facilitation

is an intensive, time consuming task with the facilitator needing to be online most days to keep abreast of the discussion and promote dialogue (Harris & Sandor, 2007). This finding is consistent with literature that suggests time delays in postings are a common frustration with asynchronous discussion forums (e.g. Finegold & Cooke, 2006; Vonderwell, 2003; Young & Norgard, 2006). A shorter set time for individual forums to be open could compress dialogue, speed up the postings, reduce this frustration and expectantly improve facilitation.

Findings relating to the weeks other students facilitated the discussions

Table 2 displays participant responses to three closed ended questions on the weeks other students facilitated forum discussions. For these weeks most students indicated that their peers performing the facilitation role had sufficient knowledge on the topic (70 % agree (A) or strongly agree (SA)). This is comparable to the finding relating to the self reflection question about the participant having sufficient knowledge for the week they posted the primer and facilitated discussion (75% A or SA). In response to open ended questions relating to participant experience of their peers as facilitator, a number of positive comments were made, for example:

Some class members are extremely knowledgeable about their topics which I found inspiring.

This comment is consistent with the finding that the majority of participants (75 % A or SA) felt their peers did a good job leading their allocated discussion forum.

Table 2: Student experiences of their peers as facilitators

Question	SA	A	N	D	SD
Other students had sufficient knowledge on their topic	5%	65%	25%	5%	0%
Other students did a good job leading their discussion forum	15%	60%	25%	0%	0%
Other students were able to facilitate discussion on their topic	5%	50%	45%	0%	0%

Response in percentage, $n = 20$.

SA = Strongly agree, A = Agree, N = neutral, D = disagree, SD = strongly disagree

However, only around half of participants (55 %) agreed or strongly agreed that their peers were able to facilitate the discussions. This contrasts with the finding relating to the self reflection question about the participant being able to facilitate discussion (75 % A or SA). In response to an open ended question relating to their peers discussion forum facilitation skills, several participants indicated there were shortcomings or limitations to their abilities:

Some couldn't facilitate, they replied to postings only and didn't actually facilitate a discussion.

Compared to the results from the week the student facilitated the discussion themselves, it is evident that the students felt they were better at facilitating forum discussion compared to their peers. As part of the orientation for the course, students are provided with information on discussion forum facilitation including what is expected of them when they are placed in this role. The quote above criticising the facilitation of some of his/her peers contrasts with the quantitative data presented in table 2. This disparity between quantitative and qualitative findings could be attributed to the difference between offering a general quantitative assessment of peers facilitation skills and the opportunity to qualify such assessment and provide more specific commentary. Furthermore, the finding that students perceived their own facilitation skills to be better than that of their peers can be explained through social psychological theories relating to attribution and social comparison that posit people are more likely to perceive themselves in a more positive way than others (Vaughn & Hogg, 2005). In the present study, students over attribute when considering their own facilitation efforts and under attribute when considering their peers facilitation skills.

Conclusion

This paper has presented findings of research to develop the online discussion forum as a context that supports student centred peer e-learning, in particular, the experience of students as leader of the learning process. The findings indicate students were largely positive towards their positioning at the centre of the learning event as content expert and facilitator. The innovation of combining the preparation and posting of a short essay (discussion primer) with the facilitation role was supported as a means to accord the

student the required expert standing within the forum. However, greater guidance on the role and process of facilitation is needed for the students to more effectively manage critical, constructive and lethargic discussion. Nevertheless, this paper has presented a means to effectively position students at the centre of an online peer learning experience. Such an approach could be of interest to academics looking to incorporate CMC and create or maintain meaningful peer learning opportunities for their students.

References

- Boud, D. (2001). Introduction: making the move to peer learning. In D. Boud, R. Cohen, & J. Sampson (Eds.), *Peer learning in higher education: learning from and with each other* (1-18). London: Kogan Page.
- Finegold, A. R. D., & Cooke, L. (2006). Exploring the attitudes, experiences and dynamics of interaction in online groups. *The Internet and Higher Education*, 9, 201-215.
- Garrison, D. R. (1997). Computer conferencing: the post-industrial age of distance education. *Open Learning: The Journal of Open and Distance Learning*, 12(2), 3-11.
- Harrington, H. & Hathaway, R. (1994). Computer conferencing, critical reflection, and teacher development. *Teaching and Teacher Education*, 10(5), 543-554.
- Harris, N. & Sandor, M. (2007). Developing online discussion forums as student centred peer e-learning environments. In *ICT: Providing choices for learners and learning. Proceedings ascilite Singapore 2007*. <http://www.ascilite.org.au/conferences/singapore07/procs/harris.pdf>
- Heaney, J-G., Gatfield, T., Carke, P., & Caelli, J. (2006). Using action research to implement and evaluate peer learning in marketing courses: engaging students through self-learning. In *ANZMAC 2006: Advancing theory, maintaining relevance. Proceedings ANZMAC Brisbane 2006*.
- Johnson, G. M. (2006). Synchronous and asynchronous text-based CMC in educational contexts: a review of recent research. *TechTrends*, 50(4), 46-53.
- Kear, K. L., & Heap, N. W. (2007). Sorting the wheat from the chaff: investigating overload in educational discussion systems. *Journal of Computer Assisted Learning*, 23(3), 235-247.
- Rourke, L. & Anderson, T. (2002). Using peer teams to lead online discussions. *Journal of Interactive Media in Education*, 1, 1-21.
- Stodel, E. J., Thompson, T. L., & MacDonald, C. J. (2006). Learners' perspectives on what is missing from online learning: Interpretations through the community of inquiry framework. *The International Review of Research in Open and Distance Learning*, 7(3), 1-24.
- Tallent-Runnels, M. K., Thomas, J. A., Lan, W. Y., Cooper, S., Ahern, T. C., Shaw, S. M., et al. (2006). Teaching courses online: a review of the research. *Review of Educational Research*, 76(1), 93-135.
- Tien, L. T., Roth, V., & Kampmeier, J. A. (2002). Implementation of a peer-led team learning instructional approach in an undergraduate organic chemistry course. *Journal of Research in Science Teaching*, 39(7), 606-632.
- Vaughn, G. M., & Hogg, M. A. (2005). *Introduction to social psychology* (4th ed.). Frenchs Forest, NSW: Pearson Education.
- Vonderwell, S. (2003). An examination of asynchronous communication experiences and perspectives of students in an online course: a case study. *The Internet and Higher Education*, 6, 77-90.
- Young, A. & Norgard, C. (2006). Assessing the quality of online courses from the students' perspective. *The Internet and Higher Education*, 9, 107-115.

Authors: Neil Harris, School of Public Health, Griffith University, University Drive, Meadowbrook Queensland, Australia, 4131. Email: n.harris@griffith.edu.au
Maria Sandor, School of Life Sciences, University of Skövde, 541 28 Skövde, Sweden.
Email: maria.sandor@his.se

Please cite as: Harris, N. & Sandor, M. (2009). Positioning university students as leaders of the learning process within a peer e-learning environment. In *Same places, different spaces. Proceedings ascilite Auckland 2009*. <http://www.ascilite.org.au/conferences/auckland09/procs/harris.pdf>

Copyright © 2009 Neil Harris and Maria Sandor.

The authors assign to ascilite and educational non-profit institutions, a non-exclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to ascilite to publish this document on the ascilite Web site and in other formats for the Proceedings ascilite Auckland 2009. Any other use is prohibited without the express permission of the authors.