Student views on participation and interaction in student centred online discussion forums

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It is important for higher education to evolve and incorporate new teaching and learning technologies as they emerge. While such technologies can offer new educational possibilities, it is vital to ensure their usage is grounded in pedagogical thinking and enriches the learning experience of students. Computer-mediated communication (CMC), and more specifically online discussion forums, is being increasingly utilised. However, how to best incorporate such applications remains modest amongst most academics. This paper presents a framework of the online discussion forum as a student centred peer e-earning environment. In particular, the paper presents research findings relating to student views on participation and interaction in these online discussion forums. Data was gathered through semi-structured interviews with students. The findings support the discussed framework in that it allows students to take an active role in their learning and enriches their learning experience. In summary, the framework provides a viable mean of implementing peer learning in an online learning environment.

Keywords: Discussion forums, peer learning, participation, student views

Background

More and more academics are incorporating computer-mediated communication (CMC) in their delivery of curricula. Yet knowledge and skills of how to use CMC to its best potential remains fairly modest amongst most academics. Computer conferencing, and specifically online discussion forums, is one application of CMC that is being increasingly utilised, however, in order for educators to achieve improved learning outcomes it is imperative that teaching and learning strategies incorporating online discussion forums are pedagogically sound. As such, the increase in usage of online discussion forums in higher education has led to the associated need to increase our understanding of how to best incorporate such applications into teaching (Stodel, Thompson, & MacDonald, 2006; Tallent-Runnels, Thomas & Lan et al., 2006).

The nature of asynchronous online discussion forums (messages and postings can be viewed when convenient for participants) offers students the time to reflect on the topic or discussion and thereby encourages a more in depth and constructive dialogue (Garrison, 1997; Johnson 2006). While much of the online or blended delivery of courses in higher education is didactic in nature, the distinctive asynchronous platform can be used to promote peer learning (Harris & Sandor, 2007; Kear & Heap, 2007). It is well established that peer learning is of educational benefit in that it allows for sharing of knowledge and ideas among students (Boud, 2001) and deepens cognitive understanding (Biggs, 1999). Considering the benefits of peer learning and the online discussion forum as a significant medium to promote peer learning, a framework marrying the two would be of considerable educational value.

The framework

Figure 1 presents a model of discussion forums as a student centred peer e-learning environment. This framework promotes greater student involvement by positioning the student as central in the learning process. The student is situated as the content expert and facilitator on a specific topic at the centre of the learning event, shifting the focus from the instructor to the student. The instructor has been repositioned as the overseer of dialogue, remaining abreast of the discussion should support and guidance be needed. The student becomes content expert by preparing and posting a primer or short essay (approximately 1

000 words) on a specific topic (e.g. Choose a health behaviour change model and discuss it's strengths and weaknesses in understanding and addressing a health issue of your choice) giving the student greater knowledge on the topic compared to his or her peers. All other members of the forum group comment on or build upon the primer that has been posted. As content expert, the student who posted the primer is also required to facilitate the discussion surrounding their particular topic.

This framework has been developed over the last four years in two postgraduate courses, namely social and behavioural determinants of health and environment and population health. Both of these courses are delivered in both blended and online modes to a combined cohort of between 25-40 students who generally have limited experience of online discussion forums. In these two courses the framework has been a central component and provides the basis for the majority of the assessment. Discussion forums run weekly with students being assigned to write a primer on a set topic corresponding to course content. Students are then assessed on their primer, the facilitation and their postings in all discussion forums (70% of total assessment: 30% primer, 30% postings, 10% facilitation). To compress the discussion and keep the momentum within the dialogue, forums are only accessible for two to three weeks.

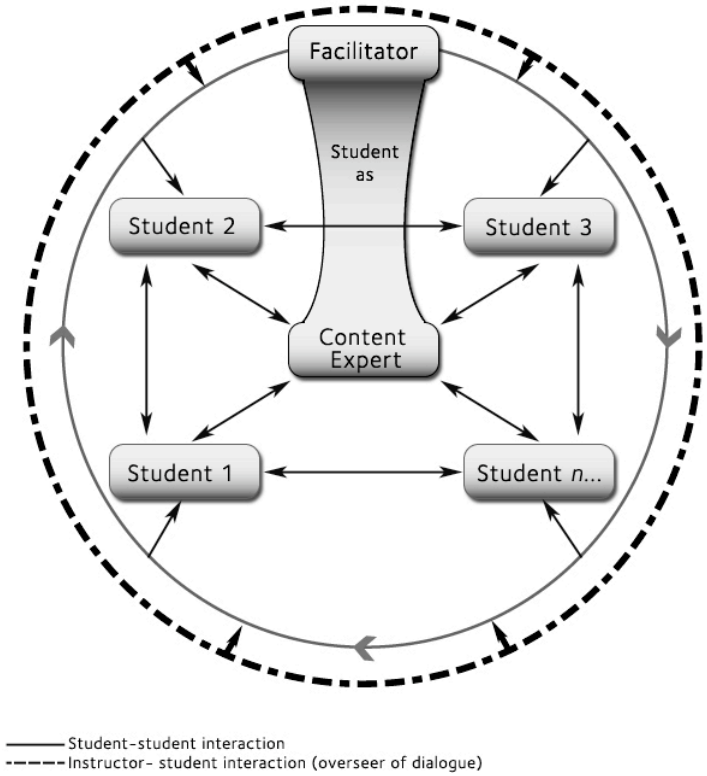

Figure 1: Online discussion forum as a student centred peer e-learning environment

Student participation and interaction

For online discussion forums to function effectively there is a need for active member participation. Consistent with the peer learning literature, it has been demonstrated that participation and interaction in online discussion forums adds value to student learning outcomes (Garrison & Anderson, 2003; Lipponen, Rahikainen, Lallimo, & Hakkarainen, 2001). As such, student participation is central to the framework discussed and presented above as figure 1. However it is not so much simply participating in the discussion forums but how that participation enhances the students' learning experience. The present paper shares findings relating to student participation and interaction in student centred discussion forums, in particular, it examines student views on participation and interaction and ways it enriches the learning experience.

Method

The data was gathered through semi-structured interviews consisting of closed ended Likert-style questions, with response categories ranging from strongly agree through neutral to strongly agree, and open ended questions. The interview was structured around five themes: mediating factors; role and

effectiveness; participation and interaction; learning opportunity and facilitation. The questions relating to participation and interaction, the focus of the present paper, focused on three areas: supportive learning environment, engagement with content and extent of participation.

The sampling frame for the research was all students (n = 31) enrolled in one or both of the two courses in 2007 where the framework has been used. Students received invitations to participate in the study by email and information via course websites. Out of the 31 students who were asked to participate 20 students agreed to take part. The data was analysed using both quantitative and qualitative methods. The closed ended questions were analysed with descriptive statistics. The open ended questions from the semi-structured interviews were transcribed and have been used to explain the quantitative results. Ethics approval for the research was granted by Griffith University Human Research Ethics Committee (Protocol No. PBH/21/07/HREC).

Results and discussion

With regard to the framework generally, findings to date have demonstrated that the majority of the students are positive about the approach. Students reported that they found the approach to be important for their learning experience (35 % agreed (A) and 50 % strongly agreed (SA)), it enhanced their learning outcomes (60% A and 25 % SA) and encouraged them to take ownership of their learning (55 % A and 35 % SA). Specifically regarding participation and interaction, the focus of the present paper, findings are organised below relating to the three areas of:

- providing a supportive learning environment
- engagement with content
- extent of participation.

Table 1 presents student responses to three quantitative questions relating to providing a supportive learning environment.

Table 1: Student views on a supportive learning environment

Question	Responses in percentage (*n*=20)				
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Participation in these discussion forums promotes social interaction between course participants.	0 %	10 %	25 %	55 %	10 %
These discussion forums provide a "safe" environment to state my views and opinions on course topics.	0 %	0 %	20 %	55 %	25 %
I enjoy participating in these online discussion forums.	0 %	10 %	20 %	45 %	25 %

The table shows a majority of the students felt that the approach provided them with a supportive learning environment in that it promoted social interaction, provided a safe environment for them to post their views and participating was enjoyable. These results indicate that the approach offers a non-threatening learning environment and support a sense of community, or as one student described it: "I feel I am motivated to participate in the weekly postings because I feel part of a team". There was however some diversity regarding social interaction evident in the open ended questions. In contrast to the above quote and the quantitative result on social interaction, some students felt that the approach only promoted limited social interaction. This may be due to the course requirement for postings to be academic in writing style and appropriately supported by research literature. As one student commented:

> Difficult to enhance social interaction, most people are doing the discussion forums because of the assessment requirements. It is fun but in terms of interaction it is more of an academic interaction.

This suggests that the stipulated academic nature of the discussions may stunt more informal or explorative discussion on set topics. However, it must be remembered the intent of the forums as a component of tertiary level study is to encourage students to engage with academic material and use these materials to inform and support their own views.

Table 2 displays the breakdown of student responses to questions relating to engagement with content. Almost all participants agreed that the approach encouraged intellectual support in that it allowed for sharing of knowledge and ideas. In addition, most students felt that interactions in the discussion forums challenged them to critically reflect on course content. These findings support the understanding that peer learning strengthens engagement with content and thereby deepens learning and cognitive understanding (Boud, 2001; Biggs, 1999). Furthermore, the majority of students found the interactions in the forums motivated them to become more involved with the content. In support of the quantitative results one student commented "I like the different approach to learn by being active instead of just learning lecture notes" and another student commented:

> Studying books or relevant material directly is often uninteresting. But following discussions is naturally interesting and motivates you to go through books and materials. It is an analysis on a topic "together".

These quotes suggest that requiring students to discuss a set topic rather than simply read and report about it gives them greater motivation to explore the topic and course content further. This demonstrates that the framework incorporating online peer learning provides students with the necessary context to take a more active role in their learning. Such an approach to learning is aligned with a more constructivist view of teaching and learning rather than the traditional didactic delivery of content (Richardson, 1997).

Table 2: Student views on engagement with content

Question	Responses in percentage (*n*=20)				
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Participation in these discussion forums encourages intellectual support (sharing of knowledge and ideas) between participants.	0 %	0 %	10 %	50 %	40 %
Interactions with other students in these online discussion forums motivate me to become more involved with the course content.	0 %	15 %	5 %	65 %	15 %
Interactions with other students in these online discussion forums challenge me to critically reflect on the discussion topics.	0 %	5 %	15 %	55 %	25 %

Table 3 provides a summary of student responses regarding extent of participation.

Table 3: Student views on extent of participation

Question	Responses in percentage (*n*=20)				
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Interactions with other students in these online discussion forums encourage me to continue participating in the discussion forums.	5 %	10 %	25 %	45 %	15 %
Interactions with other students in these online discussion forums encourage me to be more active in the discussion forums (e.g. writing more and/or longer postings).	0 %	5 %	10 %	60 %	25 %

A majority of the students felt that interacting with their peers encouraged them to be more active in the forums. One student commented that "It can be a bit competitive and you'll post more". This quote indicates that although it is a course requirement to take part in the discussions (minimum requirement of one post per forum of approximately 200 words plus references), participants post above required levels just to get their point across or to be a strong participator. In contrast, there was more diversity in participant views in relation to longevity of participation. There were no comments in the related open ended question regarding participation and interaction that qualified this finding.

However it could be attributed to the fact that various students felt that some discussions would only go so far, that the nature of postings and lack of skills of the facilitator would sometimes hinder the progress of discussion.

Conclusion

The aim of this paper was to examine student views on participation and interaction and in what ways that enriched the learning experience. The findings suggest that the participants were largely positive about the approach to online discussion forums that has been developed and how it nurtures participation and interaction. The large majority of students agreed that participation and interaction in the discussion forums enhanced their engagement with course content and encouraged intellectual support. This is consistent with the understanding that peer learning promotes greater engagement with course content thereby deepening learning (Biggs, 2001; Boud, 1999). Furthermore, it was established that this approach to discussion forums provided a supportive learning environment and encouraged active participation. As Roberts (2007) suggested it is not just about participating but how this participation can enrich student learning experiences. As such, this framework has provided a means of incorporating peer learning in an e-learning environment where participation adds value to student learning experiences.

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