Reflections on Engagement in Online Learning Communities

Anita Ryle, Faculty of Business, University of Southern Queensland, Australia
(rylean@usq.edu.au)
Kaye Cumming, Division of Academic Information Systems, University of Southern Queensland, Australia (cumming@usq.edu.au)

Abstract

Engagement with course content, facilitators and peers is necessary for students fully to achieve their learning potential. This paper demonstrates how peer-to-peer online interaction enables deeper learning through discourse and helps with retention issues by increasing motivation and reducing feelings of isolation.

The authors were motivated to write this paper following their personal experiences in an online postgraduate course as members of a successful learning community. Their reflections on the facilitation methods and levels of student participation during the semester are supported by quotations from chat logs and discussion postings made by fellow students in the course, thereby enabling the inclusion of a wider student voice. To give more breadth, the authors also reflect on another two shared online learning experiences which resulted with varying success in building the community of learners. These comparisons provide a distinctive perspective because the authors reflect upon their experiences as students rather than as teachers.

This research informs a future action research project to improve facilitation strategies used in a large undergraduate course and highlights strategies for facilitators to consider in the formation of online learning communities. Topics include facilitator presence, online activities, the use of regular announcements, asynchronous and synchronous methods of engagement, the tone of discussions and group dynamics.

Introduction

Online learning communities can deliver many benefits but their efficacy is by no means assured. This paper forms a preliminary examination of strategies identified in the literature with regard to peer engagement and learning communities and compares it with our experiences as students participating in online learning in three postgraduate education courses from the end of 2005 to 2006.

To inform this investigation further, chat log and discussion forum postings made by students in one course were analysed. The courses had fairly similar enrolment numbers, ranging from 24 to 33; however, the difference in the amount of discussion group activity was significant, with an average number of postings per students of approximately 10, 8 and 37 for Courses 1, 2 and 3 respectively.

The most influential experience was in an online community associated with Course 3, FET8601 Online Teaching Strategies and Tactics, offered through the University of Southern Queensland (USQ). During this course, we both became members of a true online learning community and were astounded at the benefits that we personally gained from it. What strategies and tactics enabled the forming of a successful online learning community and could these strategies and tactics be adapted for use in other courses?

The focus of this paper is to reflect on the effectiveness of peer engagement in online courses in order to identify successful facilitation strategies with a goal to engage students in online learning communities.

Literature Review

Students are motivated to enrol in online courses for many reasons such as geographical location, convenience and flexibility. Since constructivist theories regarding the gaining of knowledge and deep learning focus on social interaction, dialogue and reflection as important aspects of active learning (Ertmer & Newby, 1993, as cited in Albion & Weaver, 2006; McLoughlin & Luca, 1999, as cited in Helbers, Rossi & Hinton, 2005; Postle, 2001), it is necessary for students to interact with not only the course content and facilitators but also their peers.

What influences the motivation of students to interact with their peers throughout the duration of a course? Aragon (2003, p. 2, as cited in Stodel, Thompson & MacDonald, 2006) states that "social presence is one of the first components that must be established to initiate learning online", and Gunawardena and Zittle (1997) describe peer interaction as a major element of social presence. By interacting with their peers, students not only create an individual social presence but also contribute to the formation of a learning community (Stodel, Thompson & MacDonald, 2006). This creates a snowball effect of motivation to engage with peers, content and facilitators, thus enhancing student learning.

As discussed by Christophel (1990) and Albion and Weaver (2006), motivation is a complicated concept. They identify two forms of motivation: trait and state. Christophel (1990, p. 324) describes trait motivation as "a general, enduring predisposition toward learning", and state motivation as "an attitude toward a specific class". Therefore motivation is influenced by both intrinsic (trait) and extrinsic (state) factors. A facilitator may be able to effect state motivation only in the current course; however, s/he can have an influence either positive or negative on the trait motivation of students for their future learning experiences.

A student's motivation to engage in online dialogue with fellow students initially relies upon intrinsic factors, but one extrinsic factor is the social climate created by the community of learners. The development of social climate is to make students consider themselves insiders in the learning community and therefore heightens their motivation, participation and satisfaction (Wegerif, 1998, as cited in Oren, Mioduser & Nachmias, 2002). This relies not only on each individual student's perceived presence in relation to the other members in the community, but also on how they

perceive themselves within the community as they progress through an online course and/or program (Polhemus, Shih & Swan, 2001, as cited in Albion & Weaver, 2006).

Peer-to-peer interaction, especially when combined with similar interests and common goals, is an important element in the development of a sense of community and is necessary if an online learning community is to mature. Palloff and Pratt (1999, p. 2, as cited in Albion & Weaver, 2006) describe a learning community as "the vehicle through which learning occurs online….[W]ithout the support and participation of a learning community, there is no online course".

It is via an online learning community that the gap between the social and the academic aspects of learning is bridged (Motteram & Forrester, 2005). Such a community is best described as a "sense rather than a tangible entity" (Wiesenfeld, 1996, as cited in Brook & Oliver, 2003, p. 42) that has an energy which ebbs and flows depending upon members' active participation. Therefore its success in adult education depends on its attraction to students. They need to be aware of, and anticipate, the benefits of sharing their knowledge, skills and thoughts with peers and the facilitator (Motteram & Forrester, 2005).

Method

A literature review was conducted to investigate facilitation strategies, student interaction and its relation to the formation of learning communities. Data were collected from chat logs and discussion postings from the 2006 student cohort in the FET8601 course at USQ, of which both authors were a part. Qualitative data analysis focused on comments made regarding students' motivation to participate, and the perceived benefits of being active in the learning community. It was performed manually by sorting student comments into emerging themes, which included participation, trust, facilitator roles, social presence, the use of chat sessions and the formation of groups. Student quotations have been included with permission in the paper as originally written. They are in italics and anonymously identified by an assigned student number. The authors also reflect on their own shared experiences as members of a learning community in three online courses, including FET8601, thereby linking the theory with the authors' and their peers' experiences.

The output of this study is a discussion of facilitation strategies to feed into an action research project of an undergraduate USQ course, CIS2005 Principles of Information Security, the aim of which is to increase student motivation to engage in the learning community, with the ultimate goal being to assist with student retention and achievement of learning objectives. Action research has been chosen as the most appropriate method to achieve the goals of the future project as it allows "for a strong link between theory and practice…[and is] participative, grounded in experience and action oriented" (Reushle, 2005, p. 50).

Peer Engagement Related Findings

A study conducted by Albion and Weaver (2006), which examined students' behaviours related to social presence, identified several elements of peer engagement that students rated highly as encouraging interaction and contributing to the social climate of their learning community. These behaviours included the use of personal

examples, feedback from others and offers of help. The following excerpts from chat and discussion logs support the positive elements of social interaction recognised by FET8601 students:

> There is social presence in everything you normally say in a class (or anywhere). That same social presence should be felt online. Let students (& facilitators) know you are 'you' and you are human after all. It's the social lubricant that makes others 'want' to contribute without fear of retribution. (FET8601, Student 1, discussion forum)

> For me the connection started when you shared your personal experience about swimming and training, I felt as if we actually met. The rest became easier after this. (FET8601, Student 2, discussion forum)

> My point is that establishing social presence or just making participants feel comfortable and productive with the interface may have a lot to do with off topic and perhaps humanizing dialogue. (FET8601, Student 3, chat posting)

> I need to have someone to bounce isdeas [*sic*] off adn [*sic*] there is no-one at work that I can do that with so discussion have been important for me. (FET8601, Student 4, Chat posting)

The elements that students in the Albion and Weaver study (2006) considered less important included casual conversation and use of emoticons (e.g., smilies). However, when reflecting upon our experiences, we found that casual conversation contributed to the feeling of social cohesion and ongoing motivation, as expressed in the following FET8601 chat room posting:

> I agree that these Tuesday sessiosn [*sic*] have been great – even if we havent [sic] always achiebved [*sic*] much – we have developed social presence, collaborative learning adn [*sic*] great feedback/motivation. (FET8601, Student 4, chat posting)

Albion and Weaver (2006) identified time pressures and stress as the main disincentives to engaging in interaction. These were also discussed by FET8601 students. Other areas that we identified from chat and discussion postings included feelings of academic inadequacy, unfamiliarity with the technology and discomfort with the perceived tone of peer-to-peer dialogue.

> …when i [*sic*] first stated – I was very concernd [*sic*] that what i write would be here forever and used against me at grade time….Bad speller may equal unintelligent. (FET8601, Student 5, chat posting)

> I've been playing with this and got a bit anxious 'cause I was trying to type into the wrong box. (FET8601, Student 6, chat posting)

The state motivation to engage in peer-to-peer interaction is enhanced by students' willingness to reflect upon their online learning experiences and express their feelings to their peers. The following chat forum thread from week four of FET8601 highlights these points:

…[For] example this course has half the postings that my othre [*sic*] course does adn [*sic*] a lot of discussion (in our group) at least is not very deep and limited to a few members of the group….One of my questions is – does it matter – a lot of people are independent learners (and we are all busy) but I tend to thrive on the interaction, feeling lonely if I dont [*sic*] get repsonses [*sic*] but others may work differently. (FET8601, Student 4, chat posting)

I am not a 'lurker' more a time poor (like us all) student who spends most of her time trying to catch up with conversation. Like xxxxxx I was late enrolling and am playing serious catch up. (FET8601, Student 7, chat posting)

…you seemed quite strict [student 1] so I stood back. (FET8601, Student 5, chat posting)

[Student 5] Im [*sic*] sorry if I came across that way – I want to encourage everyone adn [*sic*] try and get deeper conversations going. (FET8601, Student 4, chat posting)

This shows a certain level of trust by participants to discuss their earlier and ongoing concerns openly without feeling exposed. This dialogue also reinforces the need for facilitators to strive for a 'safe' environment.

Learning Communities Related findings

Learning communities are nurtured by the rapport and trust that peers and the facilitator develop for one another which contributes to an ongoing willingness to engage with the community (Graves, 1992, as cited in Rovai, 2002). This is evidenced by the following FET8601 comment:

Trust and value of individuals promotes honest, non-judgmental cooperation and collaboration. (FET8601, Student 8, discussion forum)

Rovai (2002, pp. 4-5) describes the spirit of the community as a "recognition of membership of a community, feelings of friendship, cohesion, and bonding…[which] allows learners to challenge and nurture each other". This sense of connectedness improves the learner's ability to cope by lessening her or his sense of isolation (Gibbs, 1995, as cited in Rovai, 2002) and provides a non-threatening avenue to discuss issues related to her or his study (personal or content related). The following FET8601 comment expresses a willingness to reflect and thank others and shows anticipation of future interaction:

Thanks for a fantastic evening guys – I always feel more connected after the chat room experience! see you next time around. (FET8601, Student 7, chat posting)

Mutual interdependence and a sense of belonging are a result of members respecting the individual difference of group participants (Graves, 1992, as cited in Rovai, 2002) and the varied skills and experiences that they can contribute to the group.

> I learn something new each week with the chat software let alone the shared knowledge and community with such a great group. (FET8601, Student 9, chat posting)

Despite the many benefits of learning communities, learners need to shift their focus from an individual perspective to one of community which unless experienced previously they will need to learn (Stodel, Thompson & MacDonald, 2006). There is also an issue of inclusivity where different needs of individuals with varied degrees of expertise, such as undergraduate versus postgraduate, language skills and typing ability, need to be considered (Postle, 2001). Students may also need to become familiar with the online environment itself and underestimate the amount of time that this requires (Motteram & Forrester, 2005). Inconvenience can also occur owing to time required for asynchronous communication to be responded to, difficulties with technology and lack of engagement by other peers (Motteram & Forrester, 2005). This posting demonstrates frustration and raises the question whether assessment should be linked:

> I find it difficult when I try and engage in discussions and get no response at all from other members of the class – I do believe that it is approriate [*sic*] in most courses to have some form of assessment linked to participation – not based on number of postingsbut [*sic*] some upper and lower limits of expectations could be included in the subject outline for instance.
> When there is a collaborative activity, is it fair for the learners who are not as active as others to "ride on their" backs and gain the same marks?? – I dont [*sic*] believe so. (FET8601, Student 4, discussion forum)

With these issues in mind, the facilitation of online communities is a difficult process which must be planned for and constantly reviewed.

Course Reflections

The following reflections are our observations from a learner's perspective about factors which enhanced or lessened the online learning experience of three postgraduate education courses in which we were both students. The courses had fairly similar enrolment numbers, ranging from 24 to 33; however, the difference in the amount of discussion group activity was significant, with an average number of postings per students of approximately 10, 8 and 37 for Courses 1, 2 and 3 respectively.

Course 1

Regular announcements from facilitators of where students should be and what to expect were valuable in keeping us on track. The course team also included brief explanations (with links for more information) as to the benefits of participating and why things were being done in a certain way.

It was suggested that the class be split into groups of three by the course team using a spread across discipline/work areas. However, the opportunity was given for students to put forward alternative suggestions. Discussion topics were put aside for each group which were not available for the whole class to see. There were three in the first author's group; however, input was given only by two members with postings from members of the course team at times. Comments were later made by the non-

participating student that s/he felt very overwhelmed and inferior by the excellent progress made by one student. The effect that had on the first author was more of a motivational one to try to keep up with this student and not leave her or him abandoned.

In this class there was a face-to-face workshop, which seemed really to help with the forming of a community. Following this meeting, the groups were reworked to five members in each group. In this new group the first author found that she would regularly check the discussion group for postings and was very encouraged when receiving a reply. It felt like an inclusive group where discussion was friendly but not overly familiar.

The second author experienced similar situations and found the level of interaction encouraging, despite the number of postings per student, compared with the subsequent level of interaction in Course 3 (FET8601). This was the first course in the program and the guidance provided by the structure of the discussion forums, the regular comments by the facilitators and the comments and feedback by group members motivated her to continue accessing the forums and post comments and was a good introduction to the program's online learning community.

Course 2

Owing to a late facilitator change, initially there were a few areas not set up properly on the study desk. This led to some negativity in postings owing to problems accessing reading resources and assignment drop boxes. Other than this there was limited interaction. The design of the assessment was centred on individual practice which may have contributed to minimal sharing of experience of resources among peers. Although we still popped in to the discussion groups every couple of days to check for new postings, when none were present, very little contribution was made as there was nothing to bounce off or our progress was too far behind to be able to add value.

Both authors struggled greatly to maintain focus, momentum and motivation to engage in online dialogue. One author turned to people outside the course for assistance, while the other met face-to-face with the facilitator once she got to the point that she considered she was too far behind to continue. The lack of online peer interaction seemed strongly related to an inability to discuss the topics at the time allocated and thereby contribute meaningfully in an ongoing dialogue with peers.

Course 3 (FET8601)

The class was divided into four groups, three of which were based on a shared professional context and the fourth a mixed group. Students were then able to self-select which group they wished to join following brief introductory postings. All postings were visible to everyone, which was seen as a problem for some; however, we found it good to get a feel for how others were going, even though we didn't read all postings. At times we even posted as 'foreigners' to other groups.

Our group consisted of 11 participants. The participation rate did wax and wane during the semester but at key times most did interact. It was decided to have a fixed date for a weekly online chat session for anyone able to attend. There were only three

consistent attendees, but this was still sufficient to maintain momentum and motivation.

There were regular group activities requiring various roles to keep interest levels high and encourage collaboration. Methods of completing the activities were left to the group members to decide and led to quite diverse strategies being experienced. Some of these included Wikis and synchronous tools such as WebCT chat, Elluminate and Skype. There was also a real team feeling which developed through the use of a group name rather than just a number and the sharing of photographs made possible by one of the members putting together a mind map of the team, which included locations, interests and photographs.

The FET8601 course was the impetus that raised our interest in the dynamics of learning communities as we felt that it was a great exemplar of successful facilitation of online learning.

Strategies for Facilitation

Given the identified advantages to online discourse, it is important that peer-to-peer engagement is fostered by facilitators. Motivation can be enhanced greatly by peer-to-peer interaction, leading to the forming of learning communities. However, this does not happen without the facilitator setting up a conducive environment and course structure to encourage students. When facilitators scaffold and model the introduction of community behaviour, particularly for inexperienced online learners, this fosters students' development of online learning skills.

Christophel (1990) found that motivation towards a course is higher when the facilitator's responses are perceived as more immediate. Christophel and Gorham (1995) went on to say that establishing teacher immediacy in the early stages of the course carried through and therefore effort must be made from the start. Teacher immediacy is similar to students' social presence – to be seen as a real, approachable person (Albion & Weaver 2006). In an online environment, this may be achieved by the style of facilitator postings being more conversational. Not only can facilitators motivate students but also lack of teacher immediacy was found to have an even stronger demotivational value in Christophel's and Gorham's (1995) study.

The following subsections discuss strategies that must be considered by a facilitator to foster learning communities.

Facilitator presence

An important decision for facilitators to make is their role in the discussions. Oren, Mioduser and Nachmias (2002, pp. 14-15) suggest that facilitators "minimize their interventions to allow students to interact more freely and encourage self initiative", whereas Lally and De Laat (2002, as cited in Helbers, Rossi & Hinton, 2005) suggest that teacher presence enhances learning.

> The role of the facilitator/moderator in online learning is really important. Knowing when to insert yourself, when to pull back, when to encourage, sometimes even when to halt unproductive threads if the ship looks like it will end up on dry land. (FET8601, Student 10, discussion forum)

Our finding was that the level of presence required by facilitators to maintain and encourage student engagement declined during the semester. By modelling desired behaviour and encouraging students to be responsive and reliable in early weeks, the facilitator will help to develop the self-sufficiency and trust of the learning community (Preece, 2000). Although facilitators may not be required to post throughout the entire course, they still need to maintain vigilance in observation of the learning community so that they are able to step in if the need arises. This could include isolated students, incorrect advice and inappropriate conduct.

Consideration needs to be made as to the most suitable medium for contacting students. The use of email provides a mechanism to approach learners personally and sensitively (Postle, 2001), while postings to open forums allow others to benefit as well.

Setup of discussion topics
To make the organisation and finding of relevant postings easy for the students to negotiate, time must be taken to set up the discussion area with appropriate topics prior to the start of the semester. As the semester progresses there may be further topics to be added and the order may be adjusted to keep the most important and/or current topics easily accessible.

If there are to be subgroups formed then specific areas for their use must be established and thought taken as to whether to allow them to be seen by all or restricted to the subgroup members only.

The inclusion of areas specifically for social interaction and student introductions can also reduce noise for those students who find social banter frustrating (Albion & Weaver, 2006).

Announcements and links to support services
Regular and timely announcements in a nurturing manner inform students of the current 'state of play' and encourage progress. Welcome messages should be structured in a way so as to foster teacher immediacy. In order to establish familiarity and confidence with the online environment, explanations and/or links to relevant support services should be provided.

Activities to encourage social presence and ongoing participation
If students visit the discussion group and find no postings or activities to engage in, they are disinclined to participate immediately and less likely to return as often. To promote engagement, the facilitator needs to ensure that there are activities in which students can participate in (Albion & Weaver, 2006) and explain the benefits to students of actively engaging (Motteram & Forrester, 2005). Once a certain level of participation is reached, momentum is easier to maintain like a "virtuous circle" (Albion & Weaver, 2006, p. 5).

Tone of discussions
It is also of value for the facilitator to set the tone of the discussions so as to develop a "supportive climate" (Albion & Weaver 2006, p. 6).

> There is a "tone" to online courses that is very much influenced by how discussion groups are moderated. (FET8601, Student 10, discussion forum)

In the study conducted by Albion and Weaver (2006), the most important social presence behaviours which maintained a desire to participate in discussions were found to be feedback from other participants and the use of personal experiences and examples. With this in mind, the facilitator can encourage these behaviours by including personal anecdotes, responding to orphaned postings and modelling appropriate etiquette.

Use of a variety of synchronous and asynchronous methods
In online courses the majority of communication is through asynchronous methods such as discussion forums and email. This allows for greater flexibility than fixed class times and can foster deeper reflection prior to posting than synchronous methods. Students with poor English skills or typing ability have the opportunity to comprehend the thread and compose their responses at their own pace. However, with flexibility, the time that can elapse before a discussion has reached its aim can be quite lengthy. This can lead to feelings of isolation or frustration at limited progress.

Synchronous methods can overcome the waiting time provided that students find a mutually suitable meeting time when work/family commitments and different time zones are involved. However, the number of participants and issues related to inclusivity (poor typing, limited English and technical issues) must also be considered.

Group dynamics
Whilst the facilitator establishes the ground rules of interaction, the students should be actively engaged in the forming and ongoing moderation of the social norms and protocols of their group (Motteram & Forrester, 2005). This should extend to leadership and resolution of conflict being encouraged by the facilitator to come from within the group (Palloff & Pratt, 1999, as cited in Brook & Oliver, 2003).

Consideration needs to be given to breaking a class into smaller groups to reduce the overload to students of dealing with busy discussions (Albion & Weaver, 2006), to form a tighter sense of community in diverse student populations or to minimise the effect of students who dominate discussion. The forming of subgroups is itself an important area as the size and makeup can greatly influence group dynamics. If the group is reduced too far, the activity can actually become too low and momentum/motivation stifled. If synchronous chat is to be encouraged, a manageable number of students is necessary as following threads can be difficult and inclusivity is diminished. Depending on the goals of the course, it may be of benefit to have a crossdiscipline grouping whereas others might benefit from similar enrolment paths and backgrounds which can lead to the forming of a learning community extending beyond the length of the course.

Conclusion
In FET8601 we did form a learning community, and our direct experience of the online environment as learners has been valuable in developing a sense of what it means to participate in and facilitate online education. The community was not established from the start of the course as simply as 'turning on a tap'; it was an

ongoing process more aligned to 'establishing a garden' that was able to thrive through the sowing and nurturing by the facilitator as well as the trait motivation of a sufficient number of students.

Strategies discussed include facilitator presence, the setup of discussion forums, the provision of activities, asynchronous and synchronous methods of engagement, the tone of discussions and group dynamics.

Consideration of these strategies in conjunction with the composition of a student cohort will inform future projects to improve the facilitation of online courses. We believe that this will help with student retention and achievement of course objectives that are the goals of most educators.

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