To post or not to post: Undergraduate student perceptions about participating in online discussions

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Computer mediated conferencing (CMC) is now a common feature of blended learning environments where students learn in both face to face and online settings. While many teachers recognize the value of online discussions for learning, students appear to have different perspectives. Consequently, their participation in online discussions is often sporadic and not genuinely interactive. This paper examines these issues and provides student perspectives about participation in online discussions which arose from a case study in a conceptually difficult subject. Systems data indicated low numbers of posted messages. Student interviews provide some insights into this lack of participation, and identify the influence of the curriculum design, especially the nature of the learning activity, and its connection to other aspects of the course, for example, assessment and the regular class sessions. Other influential factors include the student's ideas about learning, managing demands on their time and their acceptance of CMC. The paper also provides recommendations for improving participation in online discussions.

Keywords: CMC, blended learning, online discussions, participation

Introduction

Online discussions are now a common feature of university courses and have often been introduced by teachers because of their potential to improve learning outcomes, especially through their more active approaches (Harasim, Hiltz, Teles & Turoff, 1995). Teachers are currently investigating their most effective use, for example, Dysthe (2002) has discussed the way in which the online discussion texts can be used as a new thinking and dialogic device. The use of electronic technologies like online discussions would appear to fit well into the world of Net Genner students (Oblinger & Oblinger, 2005) who are digitally literate, highly mobile and connected and prolific communicators. Online discussions also offer flexibility to working students and a different and supportive communication environment for English as second language (ESL) students (Gerbic, 2005).

However the introduction of online discussions in campus based courses raises special challenges because students have expectations based on traditional learning paradigms and have difficulty understanding why online discussions are included within their courses and what the benefits might be (Armatas, Holt & Rice, 2003). Students often demonstrate their uncertainty by not contributing to the discussions, thus indicating a disjunction between teachers' intentions and practice concerning online discussions and student perspectives of this medium and its value for learning.

A continuous refrain in much of the literature, in both the distance and campus based contexts is the need for students to participate in order to get the benefits of online discussions and the difficulties in often doing so. This paper provides a contribution to this issue by presenting student perspectives on participation. It discusses a case study investigation in a compulsory law course that was technically difficult for students and was located in an business area to which they had difficulty relating. The dominant factor to emerge from the course setting was the small number of messages posted in the online discussion. The paper presents student perspectives on this issue and makes recommendations for practice based on these perspectives.

Participation in online discussions

Harasim et al. (1995) viewed participation in online discussions as a kind of 'attendance' which involved more than using a keyboard and mouse and also included social and cognitive engagement. In a synthesis of other works, Ho (2002; p.2) defined effective participation as occurring when:

online communication facilitates, amongst learners, the development of a deep understanding of the material through sharing and critically evaluating one's own and others' ideas and where connections are made within the elements of the learning material or with independently sourced material, justified through research and analysis.

Participating in this form of social and text based interaction is a modern enactment of Vygotsky's idea of learning as a socio-cultural process where language is an essential vehicle for development. Duffy and Cunningham (1996) applied Vygotsky's ideas to the computer-mediated communication (CMC) context and regarded the potential for interaction and dialogue as one of the most attractive learning features of CMC. The text based format has been linked by Rourke and Anderson (2002; p.3) to reflection and higher order thinking, namely, "the act of encoding ideas in textual format and communicating them to others forces cognitive processing and a resulting clarity". The significance of dialogue and interaction has also been recognized in contemporary pedagogical models, for example, Laurillard's (2002) 'Conversational Framework', Salmon's (2000) five stage model for online learning and Garrison and Anderson's (2003) Community of Inquiry.

A review of the literature indicates that there are three broad levels of participation. **Firstly**, there is message reading or 'lurking' (Salmon, 2003) Salmon characterized lurkers in several ways: as freeloaders, who would not give anything in return; as sponges, who lacked confidence to make a contribution or as those with skills or access problems. However Guzdial and Carroll (2002) suggested that lurkers could be learning (1) vicariously, by reading the discussions and recognising their understanding in the postings of other students, or (2) by reflecting, even though they don't post, or (3) by including the online discussion ideas into their assignments and general learning. **Secondly**, participants may read and think about the messages, and then treat the online discussion as a notice board and post their own position, for example Pena-Shaff's 'reflective soliloquy' (2004; p.260). Earlier, Henri (1995) had commented that this kind of more limited interaction was still valuable because of its role in supporting individualised learning. **Thirdly**, there is participation which is interactive and dialogic, for example, Dysthe's (2002) multi vocal (as opposed to univocal) communication and it is at this level that the learning potential of CMC is most likely to be realized both in terms of collaborative learning but also individual understanding.

Factors affecting participation

Despite the important of participation for online discussions, it appears that little substantive research has been carried out into this topic. One significant study is that of Weaver (2005) who investigated participation in the distance context including the role of social presence. She found that the type of interaction required by the course affected student participation as well as their achievement and satisfaction and that social and collaborative interaction had a positive effect. Her research identified the main motivators for student participation which were interest in the course, being able to learn from others, desire for insight into assessment, getting opinions advice and responses from others, giving and receiving help, academic improvement, deeper exploration of concepts, summaries from moderators and the overcoming isolation through other students (2005). Weaver also identified demotivators which were access, technology and forum layout problems, time pressure, irrelevant discussion topics, long and/or meaningless messages, too many postings, non-participation by others, arrogant contributors, personal discussions and irrelevant chatter, fear of looking silly and lack of confidence (2005).

Other studies have identified various influential factors which have been classified in Table 1 below as arising from the CMC environment itself, the curriculum design and student issues about online discussion and learning.

Table 1: Factors affecting participation in online discussions

CMC Environment	- access to technology at work or home				
Factors	- lack of familiarity with computers or the software				
	- the size of the discussion group, with a preference for smaller groups				
	- technical problems, but not typing skills				
	of participation which reduced the desire to participate and vice versa				
	- the absence of spontaneous exchanges				
	- too much information and most of it was trivial				
	- expressing thoughts in text rather than speech was more cognitively				
	demanding and took much longer				
	- a belief that the written messages had to be formal and perfect				
	- anxiety about posting messages due to their permanence				
Curriculum factors	- whether the discussion topic itself was interesting				
	- whether the online discussion was linked to assessment				
	- whether the online discussions were voluntary				
	- integration of the online discussions into the course				
	- satisfaction with the current interaction				
	- high overall course workloads				
	- online discussion not part of the programme culture				
Student factors	- familiarity with or amount of knowledge about the discussion subject				
	- lacking confidence in their topic expertise				
	- a preference for reading printed materials rather than the online discussions				
	- competing demands from work and home and lack of time				
	- the need for self motivation, and discipline				
	- good time management with goal setting and prioritizing required				
	- an extra workload for an uncertain return and benefits not clear				
	- lack of commitment to online discussions				
	- understanding the role and value of online discussions				
References	Grint (1989), Boddy (1999), Hammond (1999), Salmon (2000), Zaferiou,				
	(2001), Holley (2002), Fung (2004), Palloff and Pratt (2003)				

There are particular issues regarding participation in online discussions by students enrolled in campus based courses. Collis and Moonen (2001) noted the conservatism of students when flexible learning was introduced and the influence of rumours about spending all day in front of computers, never having contact with teachers and the disappearance of lectures, all of which were untrue. One major challenge for teachers was addressing the deeply held belief by students that lectures were essential and fundamental and the best form of learning and computers would change this in a negative fashion. This kind of concern is the dominant view in the literature and also applies to CMC. In an evaluation of the introduction of online discussions into an MBA finance course, Walker and Arnold (2004) reported that while the potential value of computers for learning was generally endorsed, critics of the CMC experience (60% of their students) regarded the online discussions as "simply a change in medium in the exchange of ideas with the class – a strange and unfamiliar way of conducting the learning process" (2004; p.257).

The introduction of online discussions to face-to-face courses raises issues for students about their relevance and importance for learning, especially where they are voluntary. The senior undergraduate marketing students in Molesworth's (2004) study liked the flexibility of the (voluntary) online discussions, but 43% of them did not participate or did so superficially. Molesworth concluded that the main benefit of the online discussions was the "flexibility to ignore this mode of learning" (p.89). It is somewhat surprising that Net Genners are slow to acknowledge the role of ICT in learning. However, Aspden and Helm (2004) reported that UK campus based students, especially those who worked, had positive views about CMC and identified its value in maintaining their engagement with their courses and giving them more opportunities to reflect and discuss away from their face-to-face classes.

Student participation in online discussions is an essential precursor to any learning benefits which might be obtained from this medium. The literature indicates that not much is known about what motivates students to contribute, and the way in which factors like the course design or the CMC environment influence student behaviour. The recent introduction of CMC to campus based courses in business also

means that participation issues in this context have not received much consideration. This paper provides some insights into these issues from a student perspective.

The research study

The research presented here was part of a wider investigation into the ways in which campus based undergraduate business students learn in online discussions in a blended environment (a mixture of faceto-face and online elements). The project took a learner perspective and focused on (1) the influence of the CMC environment, particularly writing, and peer interaction and (2) the influence of the curriculum design e.g. the learning activity, assessment. Participation was not specifically one of the aims of the study but emerged as a major theme in one of the case studies of the project.

Context

The research was sited within a law course in a business degree programme which was compulsory for students studying commercial law or wanting to meet professional accounting requirements. Law was regarded as a conceptually difficult subject, with its emphasis on the correct application of principles, supported by legal reasoning. The degree programme had a small class philosophy, so there were no large lectures, and instead, classes comprised 25- 30 students. The course was in flexible mode with a two hour face to face evening class each week followed by online discussions. The weekly classes were based on PowerPoint slides and were supported with a course handbook and a website which contained revision quizzes, articles, course materials and web sites links.

The teacher had inherited an existing course and was not highly familiar with its flexible mode. The online discussion activities are described below in Table 2.

Table 2: Online discussion activities

Each week, 2 -4 exercises were posted in the discussion forum as threads, and students were expected to do all of them. These were carefully scaffolded for difficulty and progressed from recall, to comprehension to more complex scenarios which required correct solutions, and precise use of the concepts and language.

Examples

- (1) Define the term "internal governance". [recall]
- (2) Why would the members of a company choose not to have a separate constitution? Why would they decide that it was necessary to have a separate constitution? [comprehension]
- (3) Lia and Dan wish to form Liandan Co Ltd to carry out a food retailing business. They ask you to prepare the necessary documentation. In discussion you ascertain the following: both Lia and Dan would like the internal governance rules to provide that each is entitled to be a director of the company and cannot be removed against their wishes. They would also like to include a provision that all business decisions involving expenditure of more than \$10,000 must be agreed to by both directors. Can they do so? [problem/scenarios]

Students were also given Guidelines for Online Discussion – a page of generic tips on participating e.g. prompt replies, reading and responding, questioning, clarifying, providing a reference, examples etc.

The teacher regularly discussed expectations in class, including the benefits of a running conversation on the exercises and encouraged students to participate in the online discussions

Solutions to the exercises posted on the website, and generally comprised an outline of the main points.

Research design and methodology

A case study approach was chosen because of its ability to best achieve the research aims by providing thick rich description and new insights (Merriam, 1998) in a comparatively new area of research. Such an approach could provide findings that were grounded in reality, and supportive of an 'ecological validity' (Enwistle, 1997) approach, where theory was derived from the kind of context to which it would be applied in future. The case study design also supported the investigation the interrelationships between online discussions, the curriculum and face-to-face classes.

Multiple sources of data were included. Initially paper based and online course information was analysed to develop a description of the case setting. Content analysis of the online discussions was abandoned because only 31 postings were available for the semester and 15 of them came from one participant. Systems data regarding message reading and posting frequency and course and performance data were also analysed. The main source of data were interviews with the participants regarding their experiences and perspectives of the online discussions in this course and their relationship to their face-top-face classes. During the interviews, students had access to an archive of the online discussions via a laptop and this approach seemed to aid students' memories and enabled them to illustrate their points as well as creating a more relaxed atmosphere. Transcripts of the interviews were imported into NVivo where they were coded and then analysed in an inductive fashion for themes and patterns. Several layers of analysis followed which incorporated perspectives from the other data and developed some overall findings.

Seven students (25% of the class) agreed to participate in this case study, and they are described below in Table 3.

	Ethnicity	Grade	Age	Major	Online learning experience	Online discussion experience	Work	Full or part time study
Lucy	NZ	В	25-30	Acc	1-2 papers	No	> 10 hours	PT
Alexa	NA	С	20-24	Law	3+ papers	Occasionally	> 10 hours	FT
Jane	NZ	A	31-34	Law	3+ papers	Occasionally	FT	PT
Paul	NZ	В	20-24	Acc	1-2 papers	Occasionally	FT	FT
Cath	Chinese	C	<40	Acc	3+ papers	No	No	FT
Emma	Chinese	C	<40	Acc	1-2 papers	Often	No	PT
Sandra	Chinese	C	20-24	Acc	3+ papers	Occasionally	No	FT

Table 3: Participant descriptor (using pseudonyms)

Six of the participants were female and all the participants were working or had worked before, or had family responsibilities. Three of the participants were Chinese and English as second language (ESL) speakers. Only one student had significant experience in online discussions and two of them had no experience. One of the participants obtained the highest grade for the course and the overall performance for the other participants was lower than that of the class overall.

Results

Systems data

Despite active teacher messaging, the overall picture that quickly emerged was one of low levels of posting by the participants, which was also reflected in whole class activity. The postings were evenly spread across the three different kinds of exercises (recall, comprehension and problems) with a maximum of ten postings for any individual exercise and half of the exercises having one to three postings. The participants posted fewer messages than the class average (Five messages per participant versus six messages per student in the class). One of participants, Sandra did not make any postings. Lucy made the most postings comprising 15 messages over six weeks. The other five participants, Alexa, Jane, Paul, Cath and Emma, operated minimally and made one to six postings over one to three weeks of the course. The overall character of the message activity was that of placing on a noticeboard and dialogue and interaction were rare.

Interviews

The interviews were analysed and scrutinised for differences between the three different levels of participation (none [Sandra], minimal [Alexa, Jane, Paul, Cath and Emma] and the most [Lucy]), however, these were minimal.

Views of learning and knowledge

All of the students had quite pragmatic views about knowledge and saw it as a mixture of conceptual understanding and developing skills for their careers in accounting. All of them liked to learn in a structured, teacher led classroom and only Jane and Paul liked and recognised the value of discussions for learning. Cath, Emma and Sandra all regarded the teacher as the expert and someone who could give them rapid feedback and help them to understand the subject.

CMC environment

In this course, the main benefits of the online discussions were associated with reading the messages, which the participants said enabled them to check their own understandings. Emma said:

...at first I was confused... Then I watched other students discussing and their opinions so that I could understand.

This included Sandra, who did not post at all, who said that every week, she mapped out the answers in her head and then looked at the postings, especially if the topic was a difficult one. Despite their low levels of message posting, all of the students, except Paul, could describe the benefits of writing their postings and these included embedding understanding, clarifying ideas and using the technical language and concepts correctly. Lucy, Alex, Jane and Paul all preferred the face-to-face environment for discussions and disliked the online environment because there was no immediacy or flow. However, Emma and Cath (both ESL students) both preferred online discussions because they could participate and interact more easily than in a face-to-face environment. For them, reading and writing messages was easier than listening and talking in class and its asynchronous nature meant that they had time to think about the postings and their response. Also, the virtual environment meant that the focus was on the topic rather than their identity, as Cath described:

I don't have to think about what the student is male or female, happy or unhappy, or personally talkative or less talkative person or maybe he is personality difference...I can just put my opinion.... No worry about actions...or do you like Chinese or not. You don't worry about him. We are discussing topic, not each social difference, personality difference.

The curriculum

Everyone gave the same reason for not participating and that was the fact that the online discussions were not assessed or required for the course. Some of the students thought it was unfair that people could read their contributions without posting themselves and everyone knew that the exercise 'solutions' were available on the website. All of the students, except Lucy (who was not working and enrolled in only two papers), described being under considerable pressure of time as they tried to balance their study with their work and family commitments and in their prioritising, the voluntary nature of the online discussions always gave way to more pressing demands. Emma said:

we are busy, busy, busy so we just do what is urgent or important.

This was despite the fact that the course had been redesigned to reduce face-to-face contact time and workload and create a space for the online discussions.

The other reason that emerged for low participation was the nature of the online discussion activities. While the discussions activities had been carefully designed to scaffold learning, the students regarded them as uninteresting because they mostly had a single correct answer. Paul described this as regurgitation from the textbook:

Instead of you going away and having to think about it...you could just take a paragraph straight out of the textbook.

Jane saw it as homework posted onto a noticeboard:

Because there's a question, you go and research it and you respond and that's it...homeworks done... I don't... necessarily read what other people have written, because

everybody just answers with the same response. So its not really a sharing of ideas, its really an answer to a question... the only reason I read other people's was to help me put my own together.

Cath and Lucy (the best contributor with the most time) felt de-motivated because it meant that very soon after the discussions started, there were no new points to make:

So, there's not really much else to add. And ... then you kind of, I don't know, always feel a bit useless after, you know, having to say...everyone else has already answered, you know, said what I want to say.

Alexa did not like the online discussions because, owing to the nature of the subject, she could not draw on her experience and they were too complicated. Analysis of the discussion exercises indicated that one third of them involved recall and comprehension of fundamentals and the balance of them were based on technically right or wrong concepts with little room for different opinions.

All of the students, except Alexa, could describe a good discussion activity. Business or accounting problems were widely identified and Lucy and Paul stressed the importance of contemporary and substantial issues that required thought, interpretation and application of the course concepts. Another important discussion characteristic was that of multiple viewpoints, with room for sharing ideas, and agreement and disagreement. Paul and Sandra wanted discussions that were well linked to the face-to-face classes and suggested that group, instead of whole class activities would encourage more participation.

The teacher was very active in the online discussions and the feedback and extra comments that were provided were much appreciated by the students. However, despite the general preference of the participants for teacher led activity, this teacher's activity was insufficient to prompt participation in the face of time pressures and the voluntary nature of the discussions.

Relationship to the face-to-face classes

For the participants, there was little sense of connection between the online discussions and the face-to-face classes. The topic covered in class was recognised as the basis for the discussion exercises but this was insufficient to create strong linkages for everyone. The students acknowledged that in the face-to-face classes, the teacher explained the role of the online discussions and her expectations and regularly encouraged them to participate. However for the students, there was no sense of connection to the online discussions or, alternatively from the online discussions back into the classroom. Sandra and Paul saw the online discussions as quite separate from class – Sandra, because they were voluntary and offered no new course material and Paul, because while they were a form of homework, they were never discussed in class as was the case with homework. Lucy and Alexa both regarded the online discussions as a reiteration or review of the weekly class and for Jane, they had a strategic value in that they indicated what knowledge was important in the course. One complicating factor might have been the relative newness of online discussions for both the teacher and the participants. Jane and Paul were unclear about how they helped students to learn. Cath regarded the class sessions as fundamental in the sense that all the content and material came from them so there was no learning value in the online discussions.

Discussion

The main reasons to emerge for lack of participation arose from features of the curriculum design, followed by those relating to student perceptions of the CMC environment and their ideas about learning. These are discussed next and then followed with some recommendations for improving participation.

The curriculum

The most influential factor for participation was assessment and this finding is widely echoed in the literature, for example, Ramsden (2003) and Laurillard (2002) who have both stated that generally, students perceive that what is valued is that which is assessed. O'Reilly and Newton (2002) noted the trend in the literature for credit or marks to be given to ensure participation in online discussions and the close association with time demands as well. If online discussions are not assessed, then students must

perceive their value in some other way. O'Reilly and Newton's (2002) study identified other values as social support, learning support and benchmarking with peers; however their study investigated distance students and these benefits might not be so attractive to campus based students.

The other reason that emerged for non participation was the nature of the discussion activities. While the teacher's intention was to scaffold the discussion activities to support learning, these activities were perceived as uninteresting by the participants because they were incapable of supporting a genuine discussion. In her investigation of online discussions, Dysthe (2002) found high levels of interactivity in the absence of a participation requirement or any marks for the activity and attributed this to an authentic discussion task, on a real world topic, with no right or wrong answers and lots of positions to provide different viewpoints and stimulate dialogue. The teacher stayed out of the online discussion and Dysthe (2002) argued that this resulted in symmetry between the participants which fostered dialogue, there being no reliance on the teacher or influence of the teacher's statements on communication. Her students were postgraduate students and in an undergraduate context, where students must understand a highly abstract body of knowledge and develop interpretation and reasoning skills, such interaction may be more difficult. There are also challenges in using real world problems and scenarios because many students have no personal experience of the discipline area. It may be that, in 'hard' subjects such as this one, online discussions have less value at a beginner's level and other learning activities, for example, multimedia based gaming and simulations may be more motivational for students.

The students could not see how the online discussions connected to their class and it is important to address this because of the central role of the classroom in traditional campus based teaching. The student always prioritised attendance at class even though it was voluntary and it may be that, along with assessment, the real curriculum lies in the classroom with the teacher. The need to integrate new media with all aspects of a course has been identified by Laurillard (2002) who argued that ICT must be fully integrated with other aspects of the course, otherwise it will remain on the margins of the student's perception of the learning context. This requirement has been applied to campus based settings by Walker and Arnold (2004) and Aspden and Holm (2004) who have identified the need for online discussions to complement the classroom or add value to it in some way and Lamy and Hassan (2004) also stressed the need for online discussion activities to be fully integrated with class activities so that they aren't seen as "disassociated"

The CMC environment

With the exception of the ESL students, there were no features of the CMC environment that were motivational for the participants. Learning benefits were therefore minimal and were limited to the students reading the postings, checking their own understandings and some possible further reflection. While reading and reflecting on messages is helpful for learning, as Guzdial and Carroll (2002) have indicated, it is important that students move beyond this reading and watching stage to realize the learning value of CMC. The postings that were made were examples of Henri's (1995) individual development rather than any collective construction of knowledge that may arise from interaction. In a subject that is conceptually difficult for students and somewhat removed from their reality, there could be considerable learning benefits in articulating and interpreting course concepts, especially for marginal students. The ESL students' recognition of the worth of the CMC environment identified a potential value for this medium and has been discussed elsewhere (Gerbic, 2005).

Recommendations

The findings of this case study suggest the following factors for practitioners to consider if they wish to improve participation and especially to move beyond lurking. They can be applied in all kinds of subjects but have arisen in the context of a subject which students perceive as difficult and/or those disciplines which are not naturally discursive because their content is based on correct or incorrect application of material. Overall, the recommendations attempt to apply Entwistle and Ramsden's (1983) concept of student responsiveness to learning activities based on their perceptions of the learning environment.

(a) Assess the online discussion

Students value what is assessed Ramsden (2003), so one way to claim students' attention and priority for online discussions is to either allocate grades for the activity or include it as a requirement for the course. Research by Bures, Abrami and Amundsen (2000) found that where online discussions were worth 10% or less of a participation mark there was less participation than a course where specific activities were graded and worth 20% or more of the final mark. Some practitioners and writers (for example, Ottewill, 2003) regard this as undesirable because it supports an instrumental approach to learning. However, while this may be true, it doesn't help students to learn (Biggs, 2003), and a better approach is to consider how to engage students with the course. Assessment can operate designed to provide learning opportunities as well as measurement performance (Boud, 1995).

(b) Align the online discussions to face-to-face classes

This needs to happen at two levels. Firstly, in a pragmatic sense, the online discussions need to be linked, complementary and woven into the fabric of the course (Walker & Arnold, 2004). Often, the class will provide a foundation for the online discussion in some way, but the online discussion can also be taken back into the class. This might occur through the teacher giving feedback on the postings, basing a class activity on the online discussion, or students making a class presentation based on a critique or summary of the online discussion. Secondly, in a more philosophical sense, the online discussions need to be matched by a similar learning philosophy in class (Vardi & Bunker, 2001). This might occur through the inclusion of small group activities where the emphasis is on learning through interaction rather than learning by teacher led activity and lectures.

(c) The activity must be genuinely discursive

Students are motivated by the opportunity to share views, read multiple viewpoints and contest and debate ideas and positions. Discursive activities are more likely to move students from relatively passive stances, such as reading postings, to more active roles like establishing their own understandings and viewpoint through posting a message (Dysthe, 2002). The research literature provides many exemplars of how this might occur ranging from relatively unstructured discussions involving substantive questions, through to more structured debates, cases and problems. In a subject that is conceptually difficult, students who do not understand the basic concepts of the course may not participate in the discussion (personal communication with teacher), so various scaffolding exercises and feedback might be required before the online discussion.

(d) Prepare students for learning through interaction and dialogue

Not all students have experienced the dialogue and interaction which is the basis of online discussions. Where students are only familiar with didactic approaches, they will often have no confidence in activities which involve learning with other students. This may be heightened in conceptually difficult subjects, and hence the importance of other scaffolding devices to ameliorate this. If students can see the value of collaborative learning then they may move from online monologues to more dialogic activity. This may require explicit discussion and modeling by the teacher of the process of developing ideas by responding to other postings rather than simply stating one's own thoughts. The value of small groups in this context is recognized, for example, Stacey (1999). Small group rather than whole class discussions may assist the development of true dialogic activity, by creating a community of learners who are sufficiently comfortable with each other to introduce some elements of dissonance into the discussion. Where the course material is difficult, then small groups could also be beneficial in creating an environment where making mistakes is not embarrassing.

(e) The role of the teacher

Because online discussions represent a huge change in the learning process for campus based students, it is essential that teachers explain to students their role in learning and achieving the learning outcomes of the course. Another issue for teachers is their role in the online discussions. Teacher presence can be beneficial through direct interaction and feedback to students. However, if the teacher is not participating in the online discussion, then this may create a space where students are responsible for discussions and

this may result in more dialogic activity (Dysthe, 2002). Feedback to students can still be provided by the teacher in class. Various factors will influence this decision, for example, the course outcomes, the student profile, but the most significant factor is likely to be teachers' philosophies of learning.

Conclusion

This paper has presented student perspectives on online discussions when they were included in a campus based course. The most influential factor for students' online participation in this conceptually difficult subject was the curriculum design. This case study reflects a broader general trend where voluntary, as opposed to required or assessed activities are not prioritised by students. The case also indicated that the nature of the online discussion activity itself is critical for participation and in the absence of a requirement, students will not contribute to online discussions which are not genuinely discursive and a good fit with the interactive nature of the CMC medium. Watching discussions through lurking and being able to check one's own understanding may have some value, however, to maximise the benefits of the CMC medium, students need to participate by thinking and writing about their understanding, and engaging in dialogic interaction, that is the highest degree of participation. This case suggests that for on campus students, participation in online discussions is more likely to occur if they are well integrated with the face-to-face class and complements or add value to that class. This is somewhat dependent on the teacher's beliefs about learning.

Dysthe (2002) points out that using other people's writing or texts as a basis for thinking is new for many teachers and students and it is therefore important to develop an awareness of the way in which this process contributes to learning. Learning in this fashion raises issues about the legitimacy of online discussions as a valid form of learning. Two changes in perspective are needed; one which recognises the value of peer discussions in learning and another which involves recognition of virtual learning spaces as complementary to the traditional face-to-face environment. Both of these require thinking about new ways of learning and change from students – and teachers.

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