Integrating the experience of students through collaborative task design using student blogs

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> There is interest in the social learning advantages technology-infused pedagogy gives higher-education students. This paper reports on data that was part of a wide project from multi-campus teaching in the Bachelor of Education course at La Trobe University. The project aim was to increase the use of technology in the course by enriching the student experience and moving beyond giving lecture content. The project used a blog as the main source of communication between students who were asked to collaboratively construct a definition of learning. Results show students were generally positive about the task, although improvements can be made to the way the task was set up to avoid Mildura students feeling isolated.

Keywords: blogging, pre-service education, collaborative, first year students

Introduction

This paper reports the experiences of undergraduate students located on a rural campus using a blog to collaboratively construct a definition of learning. In doing so it contributes to current discussion about the pedagogy of technology-infused social learning in higher education. The question addressed is whether the structure of the task integrated the experience of students from a rural campus with the larger regional campus and what are the implications for future task design. The paper reports on an initial attempt to ensure that students on all campuses had similar pedagogical experiences. It informs on a salutary lesson about the nature of group work, and the possibilities offered by technology. In an attempt to integrate the student experience beyond lecture material, a task was designed that required students to work in groups to build knowledge. In this instance, given that the group members would be geographically separated, it was hoped the task would provide an opportunity for students to participate in a focused community of practice (Livingstone and Lynch 2000).

Data reported here was part of a wider project focused on multi-campus teaching within a Bachelor of Education course at La Trobe University, Australia. The aims of the multi-campus project were to strengthen technology-based support for student learning; and to integrate the experience of students on the Bendigo and Mildura campuses. These two campuses located 400 kilometres apart have students studying the same units. This is due to the students completing the same course where they actually move from Mildura to Bendigo to study from their second year. This increases the need for course parity. These units are often delivered to Mildura via videoconference from Bendigo.

Collaboration and blogs

The collaborative task emphasised the following principles of constructivism: the students were required to be active participants in the task; the students had to self-regulate their learning; the task required the students to socially interact; and each group had to make sense of the concept of learning (Krause, Bochner et al. 2006). Collaborative learning involves social risk due to the uncertainly to working with others on an open-ended task that requires participation in discussion (Hills 2007; Farmer, Yue et al. 2008). Students are likely to want to avoid embarrassment, exclusion, making a negative impression; and are likely to behave in a self-conscious way (see Hills 2007). For instance, risk averse attitudes may result in students deciding to accept a group member's idea, rather than ask questions or challenge (Lizzio and Wilson 2006). The outcomes of collaborative learning is influenced by the degree to which the group members interact and participate to achieve the required purpose (Wu 2003). For this task the communication and interaction of cross-campus group members involved the use of computer mediated communication. There are extensive pedagogical justifications for the use of online communication tools within a context of a learning environment that fosters independent learning (Mimirinis and Bhattacharya 2007). Computer mediated communication offers the potential for students to reach beyond their traditional classroom and construct collaborative learning skills online (Wu 2003). Wu identified a number of factors that influence the use of computer mediated communication: student experience or selfefficacy with the online communication tool, whether students see value in using the technology, and student concern about what content, and how, to publicly communicate.

The use of an online learning environment as the basis for group communication may have introduced a method that increased uncertainty and risk normally associated with collaboration (Mimirinis and Bhattacharya 2007). Their research was influenced by Wu's (2003) suggestion that student engagement with computer mediated instruction is enhanced by it being purposeful, structured and authentic. The specific method chosen for group communication was a blog through a WebCT platform. Blogging offered a number of advantages for this task and it was able to provide a record of conversation and evidence of collaboration. This record can be reread by group members as a basis for reflective and thoughtful dialogue (Hanlin-Rowney, Kuntzelman et al. 2006). Blogs also allow interactivity and through the expression of individual ideas, a forum for learning (Williams and Jacobs 2004). Writing a contribution forces students to think carefully about their own opinions and how their ideas will be interpreted by others (Williams and Jacobs 2004). Blogs are also conversational and provide an informal space for idea sharing. The flexibility inherent within blogs allows students to organise their learning to suit their lives (Light, Nesbitt et al. 2000). There are some potential problems with using blogs with students. These include students socialising rather than task focused discussion, reducing capacity for considered and critical reflection, students perpetuating misconceptions and errors among the group rather than challenging each other, and some students dominating the discussion (Hancock 2004). Students may also resist becoming deeply involved in collaboratively building knowledge and may prefer to remain on the boundary and only exert minimal effort (Lizzio and Wilson 2006).

Method

Data was collected through an online questionnaire and focus group interviews to examine student perspectives in detail. The interpretation of the collaborative interaction was based on multiple sources of data. All students were invited to complete the questionnaire with approximately 86 students from the 235 students enrolled in the unit completing the questionnaire. There were approximately 65 students from the Bendigo campus who completed the questionnaire and 21 from the Mildura campus. This is a good sample from the Mildura students as there were only 25 enrolled in the entire unit at that campus. Focus group interviews were conducted at the end of the unit to gather in-depth data about the collaborative task. The focus group interviews were conducted on both the Bendigo and Mildura campuses to ensure that the opinions of both groups of students were gained.

Two research questions were developed for the project. These were:

- 1. Did the structure of the task integrate the learning experience of students from two campuses?
- 2. What are the implications of this for the future task design?

The task

In 2007, one lecturer taught a first year Theory of Learning unit using video-conferenced lectures, although the tutorial groups ran separately at each campus. Of the 235 students enrolled, 25 students were located at the Mildura campus. The collaborative task was taught in Semester 2 in Theories of Learning with students required to clearly represent the concept of learning. The purpose of the task was to demonstrate how contemporary students represent and communicate ideas. Part of the unit assessment was that the task required students to use a multimodal representation to clearly represent an aspect of the concept of learning. A multimodal representation was defined as a mix of visual media used to represent and communicate an idea. The students were then asked to use a blog to actually complete the assignment. Examples were discussed during lectures and included a newspaper, web page, story board, and concept maps. It was emphasised to students that they were responsible for the successful completion of this task. Students were given five weeks to work on this task, although they could submit at any time during that period.

Students were required to self-select into groups of four that would collaborate to develop this representation. Three tutorial groups at Bendigo, comprising 75 students had to include one Mildura student in their group. The reason for using tutorial groups as the basis for this task allowed the lecturer to discuss and monitor the progress of the task. Groups that included a Mildura student were instructed to use blogs as their main method of collaboration. The blogs allowed students to send messages as well as scanned attachments. Students were told that collaboration must involve working together to produce one final representation. They were also told that they must submit evidence of the collaborative process, such as transcripts of their blogs, as well as evidence of collaborative work, such as research, drafts, rough drawings, and notes. The assessment criteria allocated 50 percent to the group's evidence of collaboration and knowledge-building.

Results and Discussion

Results show that students were positive with regards to using the blog for the collaborative task. The results are described in more detail below and there is some discussion within this section.

As can be seen from Table 1, from the 85 responses received over 50% of students felt the collaborative task was useful due to a variety of reasons. Particularly worthy to note was students having the opportunity to be creative (87.1%) and having a multi-modal format (72.9%). This meant that students were able to complete the task in ways that allowed them to express themselves. Students were positive in reporting this. 82.4% of students surveyed thought the time allowed for the collaborative task was just right.

	Not Useful	Undecided	Useful	Response Count
Multi-modal format	4.7% (4)	22.4% (19)	72.9% (62)	85
I could do the task at a variety of locations	12.9% (11)	17.6% (15)	69.4% (59)	85
I could decide when the task could be completed	14.1% (12)	20% (17)	65.9% (56)	85
The opportunity to learn independently	7.1% (6)	25% (21)	67.9% (57)	85
The opportunity to be creative	1.2% (1)	11.8% (10)	87.1% (74)	85
I could decide how to communicate with my group	17.6% (15)	25.9% (22)	56.5% (48)	85

Table 1: Student perspectives on usefulness of collaborative task.

Students were asked if they used the WebCT blog for the collaborative task, with 72% of students stating they used the discussion. Students were asked what the strengths of the WebCT discussion were and 70.5% of the 61 respondents felt that 'flexibility to communicate at any time' and 'flexibility to communicate from anywhere' was useful. Between 49.2% (30) and 55.7% (35) respondents reported that 'the ability to send attachments', 'learning how to use a blog', and 'learning how to communicate online' were also useful. Thus, this innovative task was of value to the students.

One student stated "I found the collaborative task most valuable as it provided many opportunities that are not generally presented in other classes while another stated the collaboritive [sic] task was useful, I found that I was able to be creative within my group, and I also find group work to be fun if I'm in a cooperative group". Another student felt the collaborative task allowed him/her to "get to know people, and in general, gain an understanding of relevant learning theories". From the above data it is clear that this learning task enhanced student learning and gave the students a different experience in their higher education course.

Table 2: Mean scores in response to question 'What were the strengths of the collaborative task?'

	Bendigo (n = 64)	Mildura (n = 21)
Multi-modal format	2.7	2.6
I could decide when the task could be completed	2.6	2.1
The opportunity to learn independently	2.7	2.4
The opportunity to be creative	2.9	2.8
1 = Not useful, 2 = Undecided, 3 = Useful		

Students were positive about the strengths of the collaborative task. Table 2 shows responses broken into the Bendigo and Mildura cohorts. Results for the two groups are similar and reasonably high. The biggest difference for the two groups was with 'I could decide when the task could be completed' with the Mildura students scoring this less. This may have been because the Mildura students felt they had less agency with the group due to not knowing the students in their group in Bendigo well (or at all) and because they were the minority person in their group.

Despite the lecture and the detailed handout many students were initially uncertain about what the task required them to do. One student described the task as a 'learning curve' for everyone. Perhaps next time the lecturer could give greater instructions, more scaffolded instructions, or even place stepped instructions on the LMS to ensure students feel supported and understand what is required of them. Group members tended to be judged on the extent of their contribution, and their availability when needed. One student commented "I got more input from the Mildura student than I did the other two that were in Bendigo." This may be more to do with technology availability or being comfortable with using technology than other reasons.

Communications were mainly through blogging, although some groups also used mobile phones and email. Communication was described using the terms 'challenging'. One student stated "it is all either phone, text or on the blog (and) you can't have a proper conversation and see what they are saying" while another commented "the biggest challenge was the ... actual communication and all the toing and froing regarding getting something assembled and everyone agreeing to it." Another student suggested "the problem with blogs is that they are mainly just an opportunity just to post ideas and thoughts and not necessarily enough to communicate on a regular basis ... to get the job done." While another commented:

A week before it is due and all of a sudden this entirely unknown member of the group starts to say something, he goes can someone do some work because I have done the majority of it and I was like well I have never heard anything on the blog ... and all of a sudden you have this bombshell on us so you know to me that whole thing was just pretty much a disaster.

It is important to acknowledge that some students disliked of the use of blogs to communicate. This is related to the way the task was set up. So, there are clear implications for future task design, and also clear lessons for the students, particularly for those students that think this task is difficult. It is also important to note that students realised that completing the task will take more than a quick task-focused run at this and it will require effort. These students will benefit the most from the completion of the task.

There was a perceived need for a leader to run the group and tell group members what to do. However, one person dominating was not the intention of the task. One student stated "I found that we would discuss things and then the next week those opinions would have been pushed aside" while another recorded "yeh [sic], our end result was very much one persons work", and another "and a little bit of stuff thrown in from the sides and that was it". Some groups that had three members from Bendigo just went ahead and did the assignment and then just left the Mildura student out of it and just said "don't worry about it we have done the assignment just you ... leave it up to us." This type of behaviour then led to some Mildura students reporting to feeling isolated from the other group members throughout the task. One student recorded "it is the same as like majority rules, they are with each other all of the time and they have opportunities in tutes, outside of class, to collaborate all the time, while ours was just email". Future tasks might have two Mildura students in a group which will allow for more equal groups and thus address this problem.

The results show there was the perception that the task was useful in terms of improving the students understanding of the concept of learning. This comes from the evidence of collaboration reported by the students. One student commented "we actually didn't realise how much work we had put into it until we collated all the drafts (of blog conversation) together. It was useful to reflect on our first draft to our finished produce."

Groups that reported minimal problems tended to get together early with the view of getting the task completed efficiently. One student suggested "we all wanted to get it over and done with and just sat down and said you are doing this, you are doing that."

	Bendigo $(n = 42)$	Mildura $(n = 19)$
Learning how to use a blog	2.3	2.6
Learning how to communicate online	2.4	2.5
Flexibility to communicate at any time	2.6	2.4
Flexibility to communicate from anywhere	2.6	2.6

1 = Not useful. 2 = Undecided. 3 = Useful

Table 3: Mean scores in response to question 'What were the strengths of using the blog?'

Table 3 suggests that students felt positive towards using a blog for their assignment. They felt the blog allowed flexibility to communicate asynchronously and from anywhere which is important in the 21st century.

Data collected suggests some students wanted some changes for the blog experience in the future. These included showing more examples in class and having more tutorials to discuss the assignment. Students also want the opportunity to interact and get to know the Mildura student in the group as well as the opportunity to present their ideas. This last point stems from the fact that the students worked very hard to create a clear representation for the assignment and they feel that sharing would be beneficial. However, the results overall are positive about the task. Keeping these things in mind if this task or similar tasks are taught in the future the following changes are recommended. The lecturer should ensure there is structured communication, structured communication, such as ensuring that all students have blogged at least once by the end of the first week, the unit outline includes more detailed guidelines and criteria and that there are clearly established roles and that responsibility is clearly assigned. There could be regulation in terms of how frequently the group should meet and to ensure that all group members are blogging at the same time, or close to the same time. There is also the need for a team building activity so that students begin to work as a member of a team. There should be two students at each site so that students are working with known peers. Finally students could be made accountable for the activity and instead of giving the one group mark, each person could be given a mark out of 10 for their participation, and then given a total mark out of 40. This total mark could be based on evidence of collaboration.

The literature is consistent with the findings of this study. Wu (2003) suggests that student engagement with computer mediated instruction is enhanced by it being purposeful, structured and authentic. Wu (2003) also reports that learning management systems encourages students to consider their dialogue, and carefully respond to others. They have time to read; research and reflect on the communication before making a contribution and it is task focused. On the other hand, the use of an asynchronous writing environment, such as a blog, reduces student inhibitions about writing (Caws 2006). This may have been one reason why students in this study were positive toward using the blog. An implication for task design is that interaction and communication needs to be regulated and focused, possibly with lecturer presence (Light, Nesbitt et al. 2000).

Conclusion

Collaborative tasks encourage students to be critically reflective about the learning task and resulting learning (Livingstone and Lynch 2000). Livingstone and Lynch argue that group members should have discrete tasks as this ensures that all group members contribute, allows students to have an influence on the group project, and removes group formation issues. This could be included in the future. The composition of the group is also a factor affecting performance. Livingstone and Lynch (2000) suggest groups that perform well as a result of individual and group needs coinciding. Overall, this was an interesting task with positive results for the researcher and the students who undertook the unit.

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