Virtual Communities 'Group Discussions': An Australian Teaching and Learning Perspective

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Abstract: This paper provides an Australian perspective on teaching and learning using virtual communities, mainly 'e.g. group discussions'. Understanding the increased importance of technology, Curtin Business School (CBS) has undertaken to improve and enhance teaching and learning facilities aimed at students enrolled for degrees via various modes i.e. internal, external and fully online. Currently, CBS uses the Blackboard Course Management Software (Blackboard) to provide course materials to students, which allows the development of virtual communities 'e.g. group discussions'. Using this software, the aim is to enhance students' teaching and learning abilities. This is principally achieved through either replacing traditional teaching amenities at CBS by technologically advanced medium, or allowing both media to work side by side aiming at the enhancement of students' learning experience. The Blackboard software has various approaches in assisting students interacting and sharing their knowledge and ideas with students, and simultaneously with teaching staff through virtual communities 'e.g. group discussions.' Group Discussions forums have provided various benefits to students and lectures providing teaching staff the chance to examine their students' work using this interface. Students' online work includes their interactions (i.e. student/student) and provides the teaching staff the opportunity to monitor students' progress. This paper outlines the benefits, challenges, impacts and implications of using group discussions from two teaching staff at two different schools at CBS of Curtin University. The university uses this approach in their undergraduate and postgraduate courses, both internal, external, and fully online providing ideas that might be applied to further enhance the strength of this medium. However, this paper focuses mainly on undergraduate discussion boards, with one concentrating on a mixed approach (i.e. face-to-face and virtual), while the other (being external mode) was only through the use of Blackboard.

Keywords: Australia, Virtual Communities 'Group Discussion', Teaching 'Online Teaching, and Learning, Technology, Students, Teaching Staff

Introduction

THIS PAPER PROVIDES an Australian teaching and learning perspective in relation to virtual communities, mainly group discussions. Understanding the increased importance of technology, CBS has undertaken to improve and enhance teaching and learning facilities and requirements aimed at students enrolled for degrees via various modes i.e. internal, external and fully online. Clayton (2007) posits that the increased use of computers in education, the creation of virtual learning environments (i.e. virtual communities) based on web services, and increased investments by educational institutions (fiscal, physical and human) in the development of networked environments have a positive impact on education in general. This enhancement is strengthened by the implementation

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of information technology programs in schools, colleges and universities, such as the installation of computers, the provision of notebooks, and laptops.

Technology incorporation in teaching and learning has become an important aspect leading to the improvement of students' learning. This is especially the case when coupled with more learner centered instruction as argued by Weisskirch and Milburn (2003), this becomes especially evident when incorporating technology with learning in higher education. Such inclusion assists in shifting the mindsets of both students and teaching staff, moving them from the traditional to the new paradigm that provides high level abstract through immediate exchange of information and knowledge. It is a known fact that the internet has become an important contributor in the improvement and of teaching and learning for delivering information and knowledge to students within the boundaries of secured network provided by the University. In this respect, Miller and Brunner's (2008) findings indicate that contribution's quality and quantity are significant predictors of social impact. These have several implications on online learning and interpersonal influence as it occurs in an online context such as virtual communities (e.g. group discussions). With the presence of technology, students are able to access teaching material, such as lectures, tutorials, lab exercises, and any other relevant information through any device, anywhere, and at anytime. The advantages expand to include the collaboration and cooperation amongst fellow teaching staff in responding to unit needs, especially with the increased students' numbers that forces the allocation of more than one staff member for teaching and controlling a single unit throughout university's different campuses.

A valid and strong understanding of virtual communities (e.g. group discussions) within the boundaries of one country assists in the establishment of a solid base for expansion of these communities that might include international counterparts, importance of which increases with the ongoing globalized nature of tertiary institutions. In this context, Ottewill, Riddy and Karen (2005) illustrate the nature, range and variety of international networks linking individuals and institutions and reflecting the globalization of higher education and desire of educators with common interests to shed their parochialism to better communicate and collaborate on aspects of academic practice across national boundaries. They contend that international networks in the sphere of higher education can be either subject-specific or thematic in their aims and either global or restricted to one part of the work in their membership. Ottewill, Riddy and Karen (2005) further argue, that although widespread, international networks in higher education are by no means unproblematic and questions arise as to their contribution and role in facilitating innovations in academic practice. They highlight the nature and contributions of international networks faculty are altered to this mode of academic communication and collaboration and the steps that need to be taken if the full potential networks is to be realized.

Though benefits are evident, yet Morgan (2009) warns that technology should not be given more than it worth, whereas technology is merely an enabling factor and does not guarantee that learning will occur. Morgan contends that the key ingredient of e-learning environment is interaction. For Morgan, interaction can become reality with (1) technology, (2) content, (3) educators, and, (4) fellow e-learners, so it is not only technology but other factors that might assist in developing interaction amongst students through the use of technology. Therefore, these factors are all important to e-learning. The technology and the interface merely provide the platform for interaction to take place. This gives weight to the fact that the two units discussed in this paper are different in the way of delivery, but both

have a common thread, and that is using technology for delivery of material either as the sole platform (BE3) or a combination of online and face to face teaching (BT2).

Therefore, it is evident that research concerning the benefits and improvements in the way virtual communities (e.g. group discussions) are currently used in tertiary education is of vital importance. This is more the case, with the increased globalization that is evident in Australian campuses, which is reflected in the diversified tapestry of students, of whom high percentage of international students who are enrolled in courses at Universities in Australia including Curtin University that is the subject of this paper. In addition, not to forget the other side of globalization that is in the form of Australian universities' expansion in the region, either in the form of establishing their new campuses in those countries or forming partnerships with universities located in these countries.

Virtual Communities and Online Group Discussions – Curtin University

At Curtin University, online group discussions are possible, using the Blackboard facility. Students and teaching staff are interacting through computer-mediated communication i.e. Blackboard. This type of interaction creates more knowledge and communications at two levels (1) students/teaching staff, and, (2) students/students. These communities and as defined by Blanchard (2008), are a group of people who are 'self-sustaining, social systems in which members engage and connect with each other' (2008, p.2108). Liu and Wang (2009) provide a set of characteristics of e-learning (1) an activity that is mainly based on the internet, (2) information spreads in the form of networked courses, (3) worldwide distribution and sharing of learning resources is possible, (4) a virtual study environment is created, (5) e-learning is one method of study, and, (6) adheres to the 'anytime and anywhere' philosophy for studying. While these characteristics seem to match the e-learning discussed by Liu and Wang, yet to comply with the requirements of the two units, the subject of this paper, the following model adapted from Liu and Wang would better represent the characteristics of these two unit in an Australian context.

Adopting technology in teaching and learning allows students and teaching staff to better communicate despite vast geographic distance (Australia being a huge continent), thus forming groups and communities of similar attributes (see Figure 1).
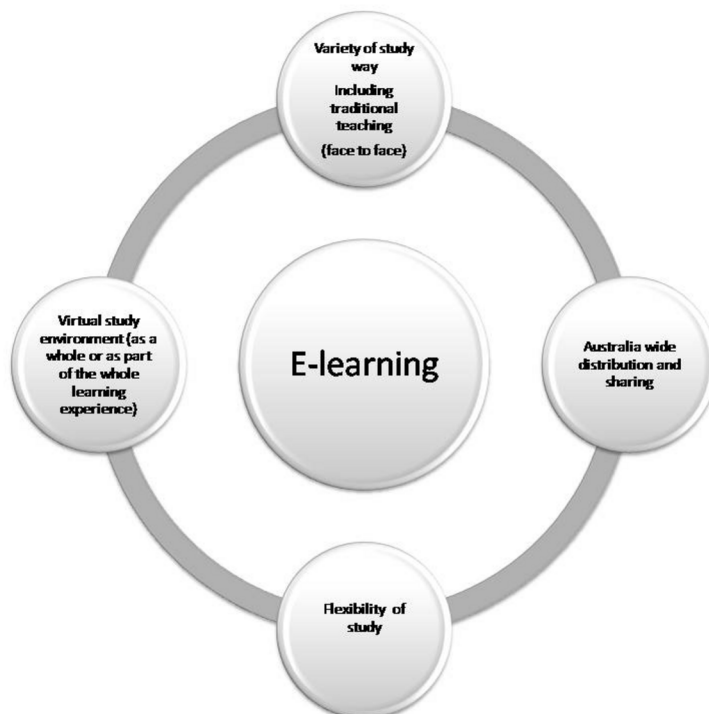
Figure 1: Characteristics of e-Learning Adapted from Liu and Young (2009, p. 196)

Further, Demiris (2006, p.179) indicates that this technology 'involves members who relate to one another as a group and interact using communication technologies that bridge geographic distance'. Being enrolled in the same unit provides the framework for students to have a similar topic and interest to discuss in this environment. Nonetheless, Alexander (2006) posits that the essence of education is not, however, does not stop at the provision of lecture summaries, schedules, or even allowing individuals access to their own, private information such as marks or account information, but it is much more.

In this respect, a study by Fang and Chiu (2010) indicates that knowledge has become the key to success not only in organizations but also in virtual communities. This is clearly displayed in their statement about virtual communities being 'groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis' (2010, p.236). Thus, it is clear that the most important concepts behind using the virtual communities are knowledge, people and social networks. These concepts, when in play, encourage students to interrelate and exchange knowledge, information and collaboration with their colleagues towards the unit(s), and these concepts might prove valuable in their workplace in the future.

In yet another attempt to understand the virtual communities, Wachter, Gupta and Quaddus (2000, p. 473) argue that virtual communities offer students another opportunity to build on and interact with 'students in a more energetic manner and to encourage continued learning while doing so'. By the same token, Alexander (2006) states that virtual communities are helpful to groups of people intending to work together towards achieving their goals and

objectives a type of work that is referred to as collaboration and cooperation. Members of virtual communities are usually assigned to work together to complete a task by sharing their knowledge, expertise and ability. In addition, adopting virtual communities to teaching and learning allows students to easily interact with other students globally to collaborate or simply 'to acquire information and knowledge' and to 'enhance learning through collaboration.' (Teo et al. 2003, p.673).

Green et al. (2006) indicates that using technology in teaching and learning increases flexibility of learning to allow students choose the learning mode and delivery, and this type of teaching and learning allows teaching staff to provide formative feedback in respect to students' ongoing assessments in addition to sharing their knowledge. Furthermore, Valck, Bruggen and Wierenga (2009) affirm that technology usage in teaching and learning allows students to share their positive and negative experiences in respect to unit materials seeking necessary help from their classmates and teaching staff. This help can serve to solve problems relating to their learning aspects thus reaching better decisions that would ultimately decrease their doubts in relation to their attitudes toward the unit materials, which increases their self-confidence.

A form of virtual communities that has gained momentum in teaching and learning is 'discussion boards'. These discussion forums would either be for sub-groups to discuss amongst themselves to come up with solution to assigned activites with the lecturer acting as the 'fly on the wall', or are general in their nature that would include the discussions by the students in the whole class and their interactions with their lecturer. These forums' usages indicate the enhancement of students' behaviour, attitudes and commitments toward the units as the majority of students indicate that actions performed in these communities, such as the exchange of knowledge and information, sharing links and news, stories, is having a 'positive effect in terms of student retention' (Robinson et al. 2009, p.7). However, adopting Blackboard in teaching and learning has few drawbacks and some ethical challenges. These can be categorized under (1) identity and deception, (2) privacy and confidentiality, and, (3) technical issues, such as sociability and usability as majority of students providing evidence that blackboard facility might not be the best interface to achieve the outcomes. This is especially so with its limited interfaces, making it rigid and inflexible when it comes to introducing some modern aspects relating to online teaching that might transform this into a more interesting platform for students, especially the new generation who are known to be technology savvy.

Discussion

Building on the above, this paper reports on virtual learning, mainly in the form of 'group discussions', but in two distinct ways. One that is fully virtual, with two types of discussion boards (1) sub-groups within the class forum, which can be described as 'virtual community', and, (2) the whole class forum, while the other includes in addition to e-learning (virtual community) a component of the traditional teaching (i.e. face to face). The authors of this paper were keen to listen, share knowledge, organize, and communicate well with their students. The most important aspect of their teaching style was sharing the latest knowledge relating to their units (BT2 and BE3) with their students. Both units had 'virtual communities' as a major component of delivering material to students. In the case of (BE3) this unit was delivered to 'undergraduate external students' whose only way of communication with the

teaching staff was through the blackboard. In this unit, the latest events in the corporate world, especially the global financial crisis, and the unfolding events, have been the main source allowing students to apply theories taught in the unit to events in the contemporary business world. It is the first time this teaching member of staff takes charge of this unit, with this method of delivery. As for (BT2) this was offered internally (i.e. students were on campus and would have face-to-face delivery of material) adopted discussion board approach to provide more interaction between students and teaching staff and to share the latest knowledge and skills with the students. To allow an understanding of what was the value of these discussion boards/forums to students, to follow are some of the comments provided by the students in their feedback on unit and teaching through eVALUate, and 'informal feedback'. This 'eVALUate' is applied at Curtin University at the end of each semester, when students voluntarily provide their feedback on the unit and the teaching staff on an anonymous basis. While, the 'informal feedback' is a teaching staff initiative, when on the fourth week of the semester face-to-face students only, were asked to provide their anonymous feedback on the unit through the concept of 'CSS'. CSS 'continue, stop, start' allow students to provide their comments of what they want the lecturer to continue, to stop and to start doing. Usually, the aggregate outcome of this information feedback was shared with the students with explanation as what will be implemented during the semester, and why some other recommendations might not be implemented either for the reason they contradict with the outcomes of the unit, or these recommendations need an overview of the unit.

Students seemed to appreciate the fact that teaching staff were prompt in updating the contents of the relevant discussion boards, which allows them to have necessary information. This appreciation is coupled with their acknowledgement of the teaching plan and efficiency of such platform:

> "What I appreciate about my unit is 'Discussion Board' … that is always up-to-date with interesting and relevant information. It is also an efficient … platform between the student and the teacher and other students. (BT2 internal)
> Great Online Tutor [teaching staff] with a very well put together lesson plan supported by very good and very robust articles. (BE3 external)
> A lot of helpful useful information posted by students and lecturer [teaching staff] allows us to learn well from the discussion board about the latest news or news that interested other student who share the information. (BT2 internal)
> The 'news items' [on the discussion board] helped to make the course feel like it was relevant to current events in the IT and business world." (BT2 internal)

Though the updated material and teaching plans seemed to be of importance to students, yet the attitude of the teaching staff seemed to have had great influence on students' achievements. Those, especially when studying at external level (i.e. distance students) might feel isolated from main stream of studies at university campus, thus, it was felt crucial that teaching staff considered this issue. From the students' comments, it seemed that teaching staff member was able to consider this that met students' appreciation. This was evident in their comments in relation to online responses, teaching material, and in the case of BE3 students' comments expanded to include their decision to transform their studies for other units to the external mode (i.e. distance) following the positive experience in this unit. In addition, some similar comments were received from internal students of BT2, whose discussion board is actually

a support to the face-to-face lecturing, tutoring and lab demonstration. This highlights the importance, and in both modes, of the 'discussion boards'.

> "I think that [teaching staff] is a very good teacher, provides very detailed feedback each week which is really good, and points out how each individual has gone the past week. (BE3 external)
> We can ask questions under the blackboard and get feedback quickly from our lecturer, Good discussion board. Our Lecturer actually gave us many helpful resources and teaching supports to help us achieved the learning outcomes. (BT2 internal)
> [Teaching staff] was a very attentive and responsive tutor and her feedback and personalised responses to individuals on the group discussion board was meaningful and beneficial. (BE3 external)
> The discussion board is very helpful to all of us as it allow you to get feedback how are answers and gets the point of view of other student doing their work. The question that answers in the discussion board is very useful as technology has become very important in our life and the board helps us to learn more about it. (BT2 internal)

Further, students were appreciative of the fact that the discussion boards were allocated marks and their efforts in researching, and providing their opinions were not only for their benefit, but would also assist in enhancing their marks in these units:

> One assignment and more involvement that is weekly is always the best method for external studies [online interaction]. (BE3 external)
> [The] 25% participation [that was only online] is great instead of more assignments! (BE3 external)

Though the material provided under these units were of diverse nature, yet it seemed that students were keen to continue to participate despite their workload, which they seem to have attributed to the understanding displayed by teaching staff, who were at the same time the virtual communities facilitators:

> I liked it how [teaching member of staff] was considerate to our contributions during those same 2/3 horror weeks you have to go through each semester to complete ridiculous amounts of assignments. (BE3 external)
> The course material and study requirements at first appeared over whelming, however after becoming familiar with the weekly readings and activities I became comfortable and felt improvement in both the required effort and writing skills required. I feel I have learnt a lot this semester and during my exam revision, many of the modules feel fresh in my mind as I review them. This is obviously a big plus. Given this is an external unit I feel it was structured well and in the event of further study I would ideally take up as many units as external as possible given full time work commitments. (BE3 external)

From the first look, students might consider a unit provided solely through online platform might have less workload; this was not the case with BE3. The discussion boards were subject to comments by teaching staff every week, it was evident that students were under pressure to complete their tasks, and felt that the workload was immense:

> The workload however, is too much. I find it very difficult to complete the required activities each week, out of all the units I have completed for my degree (and this is the last one) this is at least double the amount of work I have had to do. (BE3 external)

BE3 and BT2 in Comparison

Shortcomings and Comments for Improvements

The literature provides ample of examples on the limitations of e-learning. In this respect, cited in Cook and McDonald (2008), Clark highlights the benefits of e-learning, such as enhanced knowledge gains, efficiency, motivation, retention and transfer of new settings, stating that there have been limitations to these studies indicating that e-learning method of instruction can be considerably different to that of other methods. Clark goes on to argue that it is not surprising that learners can control the pace of learning in e-learning therefore taking less time to understand a concept than those sitting in lecture theatres. This became evident when comparing the results of both BE3 and BT2 – where the first method of teaching was purely virtual, while the second was a combination of virtual and face to face method of teaching.

As highlighted earlier, for the units under discussion in this paper, the students were informed that marks would be awarded based on their contributions to the virtual learning community. This, and as identified by Teo et al. (2003) served as an incentive for them to participate seriously and truthfully. Further, students were told that these activities and their answers would be logged to facilitate in awarding participation marks. Though there were too many comments that denote students' satisfaction with the way the discussion boards on the blackboard were run, some other comments highlighted the need for improvement.

In the case of BE3 students would participate in two different formats. The first as part of a sub-group, in which they will discuss an aspect and answer several questions, with a student providing a summary of that sub-group discussion to the main group (i.e. the class). The second is where students will be given the chance to discuss as one big group at the whole class level. This improvement was mainly the result of placing students into sub-groups within overall class group. Some students through discussion boards sought this improvement mainly reflecting the lack of participation by some students, which was a feature despite the allocation of marks to this segment of students' assessments. The main improvement concentrated on marks allocated for these discussion boards, as students were worried that the lack of participation by their group members might negatively affect their end result in this unit.

In the case of BE3, data was derived from the work of one semester, while data relating to BT2 were derived from two semesters. While data generated from BE3 students might serve adjust the level of marks allocation towards this activity when this unit is next offered online, data from the first semester for BT2 were already considered, and appropriate action was taken during second semester allowing students the best benefit. In addition, new strategies were adopted in this unit such as establishing discussion groups' forums using the blackboard facility aiming at students' development and learning. The main benefits were: (1) promoting more cooperation and teamwork, (2) generating more acquaintances between students, and, developing more interaction between the students. These benefits were imperative in the development of students' communications skills and their learning of new aspects,

which might help them to develop their skills as individuals, and be successful in global real life in the future.

Currently, the Blackboard facility is used in both units for the provision of course materials, course information, assignment, discussion board, announcements, grade centre and communications with the aim of improving engagement and collaboration between students themselves and between students and teaching staff. Discussion boards' news bulletins were generated or incorporated in the weekly detailed response to the student's participation students with up-to-date modern technological developments, or issues relating to BE3 unit. With regards to BT2, the teaching staff shared with their students the latest news in lab, lecture sessions, and online, aiming at updating students knowledge with latest developments, allowing application of theories to real life examples.

As mentioned earlier, sharing knowledge, skills and news was very significant in our teaching style, which we demonstrated and reveal up-to-date, news, knowledge, awareness and information, which was up-to-date and available in the market. These were related to the unit structure and materials, in addition to construct the linkage between the theory (behind the unit) and the real world. Every week during lecture, an approximately 10 – 15 minutes were spent discussing the latest news from various newsletters, magazines, journals, e-journals, internet and social networks. Furthermore, in the case of BT2 and on weekly basis, following the lecture, teaching staff would upload the latest news under the discussion board, to allow other students (who are working and studying simultaneously, or were absent from the lecture) to gain more information about the latest and current news in the market.

Further, to enhance students' use of the discussion board and improve their interaction with peers, in unit BT2 four discussion board forums were assigned namely; general questions, assessments, assignments and lab answers. The benefits aimed at were (1) encouraging collaboration and teamwork, (2) creating more connections and links with other students, (3) contributing information and sharing more communication and interaction between the students, and, (4) allowing students to be more creative.

These benefits might assist students' communication skills and enhance other employability competencies. In addition, the FAQ section in the assignment discussion forum has reduced teaching staff workloads.

> The lab answers forum is very useful as if you require help you can go straight to the discussion board and compare your answers to your colleagues' answers, as for the assessment and assignment forums are very useful, as I got a lot of information from there, from the lecture and peers. (BT2 internal)

The forums of BT2 were used to allow students to up-load their queries and usually those were checked and responded to twice a week. This type of communication was notable between students and teaching staff as they learned and gained new knowledge and information, which were related to the unit and their life, as well as teaching staff sharing their own experiences on this forum. Furthermore, to improve the interaction between students, a new structure was adopted under the discussion board as some students responded to their queries sharing their knowledge and experience (their responses were checked twice a week) and most of the students were appreciative of the time and effort by other students who responded genuinely to their queries.

Group discussion on blackboard is very useful and practical. (BT2 internal)

Being challenged to come out and express myself… very rewarding. It gives a compre-hensive control about net world and how we build network. (BT2 internal)

Practical approach ... This forum helps us to answer our questions and encouraging in-teracting with our colleagues. (BT2 internal)

Keeps the learning humorous going; it is easy to communicate with the lecturer [teaching staff]. (BT2 internal)

I like the discussion board because the lecturer [teaching staff] uses this to share inform-ation and encourage us to share our group exercises. (BT2 internal)

Good discussion board. It helps me knowing so many things that are not taught in this unit. (BT2 internal)

I enjoyed the unit discussion board more than the other units' board because it's always updated with news and lots of students get to share information on it." (BT2 internal)

Challenges for Both BE3 and BT2

Adopting discussion boards in teaching and learning is very challenging especially with the mixed tapestry and different levels of students of international and local backgrounds. In addition, internet connection speed poses yet another challenge for parties involved, particularly when students attempt to participate in blackboard facility that contains discussion boards from their weak internet connections at locations away from campus. These internet connections, in some cases might include the old dial-up mode that might still be in use, mainly in remote areas from where some of the external students reside who are scattered around the vast Australian land. This would be too slow to upload in some cases, and students might give up and not participate. However, discussion boards, and despite the benefits de-tailed above, and in the literature, are not taken seriously by students unless marks are attached to them, which is disappointing. This is supported by the argument posed by Teo et al. (2003) that students might be told their activities and their answers would be logged to facilitate the tutor in awarding participation marks. This aspect is not necessarily acute to discussion boards in these two units, but to any activity, that students are required to complete that does not attract marks. This might need a shift in the students' mindsets at the university level, who should be keen to build up their character which ultimately would assist them generate better marks rather than being fixated on the single bottom line (i.e. their marks).

Impacts for BE3/BT2 and Future Implementations

Adopting discussion boards in teaching and learning has various impacts coupled with bar-riers for students as well as teaching staff. Some of which have already been explored through the comments provided directly by students and highlighted earlier in this paper. While from teaching staff perspective, using discussion boards is time-consuming especially if teaching staff are involved in more than one unit during the semester. This simply means teaching staff need to assign at least three hours weekly, which would increase depending on the volume of activities assigned for that week, for checking each of the discussion board forums providing formative and valuable feedback that is aimed at the individual level (BE3), and for challenge exercises' answers (BT2). This feedback aimed at improving the students' forthcoming submissions on discussion boards.

From students' perspective, the blackboard discussion boards structure, and from their feedback (obtained through eVALUate and informal feedback), seem to be very interesting and motivating. In addition, as far as teaching staff (e.g. lecturers/unit controllers/facilitators/lab demonstrators etc…) are concerned efforts were appreciated. Furthermore, any improvements that were within teaching staff capabilities have been and were in the process of implementation, especially when this facility has been offered for more than one semester for the same unit. Further improvements are considered especially in relation to formation of groups within the virtual communities (i.e. those of BE3), and the allocation of marks for group members' participation, this might be implemented if the staff member is given the responsibility to run this unit again, if not recommendation can only be provided to the new unit controller. The importance of this is stemmed from students expressing their worries that lack of their group members' participation might affect their overall marks. Furthermore, students (i.e. those of BT2) indicated that the use of discussion boards is very challenging. This is mainly in relation to the interface and internet connection, which is especially true when it comes to uploading their lab materials and sharing knowledge and skills with their classmates.

Another aspect of the blackboard design was confusing for the students that relate to the 'submit' and 'save' buttons under the thread form of the discussion boards. The save button was not providing the function it was supposed to provide whereas information uploaded by the students when this button is pressed would disappear, which prompts the students to re-load the material, wasting time and effort. This might have attributed to creating frustration at the students' level. Furthermore, most of the students agreed that discussion board interface should be more pleasant design to allow them easily interacts with various forums and submitting their results without any difficulty. Here are some comments from the students:

> There are no issues from my perspective about the discussion board. The only think would be a more pleasant interface (Blackboard) design. (BT2 internal)
> The blackboard interface should be more interesting, rather than just simple box and words. (BT2 internal)
> The blackboard interface is too hard to use and look at." (BT2 internal)

These aspects do not reflect directly on teaching staff but on interface employed, which is currently under investigation and improvement by the IT personnel at the University.

Conclusion

This paper provided an Australian perspective on teaching and learning using virtual communities (e.g. discussions boards), providing an idea of the challenges and impacts adopting this facility using Blackboard platform for two units (i.e. BT2 and BE3). Majority of students indicated their satisfaction with this interactive facility, this is excellent, especially considering the involvement in virtual communities as challenging exercises allowing immediate interaction between students and teaching staff. Comments provided by students, coupled with the teaching staff examination of their participation provide evidence that use of this tool helps students to improve their research abilities, writing, personal skills and ultimately their character.

This tool provides students with up-to-date information in relation to transgressions in markets (to apply the theories to) (in the case of BT3), and the latest technological innovations in marketplace, providing an inter-link between theory and practice (in the case of BT2), a fact that appeals to students. Despite the benefits, this tool in teaching and learning, is time-consuming especially for teaching staff who would be involved in teaching more than one unit, and assigning at least three hours per week per unit to respond to the online discussions adds pressure onto the teaching staff workload. In addition, there were some shortcomings with the design of the blackboard that were highlighted in the students feedback, which are currently under consideration by the IT personnel at the University, allowing a better interface to provide both students and teaching staff with a better experience. While this is beyond the teaching staff control, with assistance needed from the IT staff at the University to solve.

Finally, on the part of teaching staff, further research is currently being carried out using the latest innovation in blackboard facilities to upgrade students' involvement and to re-engage them fully with the units. In this context, teaching staff are planning to use Echo 360 and Audacity software applications starting. Therefore, and in addition to using blackboard for discussion boards/forums, students will be required to upload their other assignments through blackboard, and they will be provided with the teaching staff feedback (either typed or audio) using Echo 360 or Audacity through the same medium. The benefits behind adopting this technology can be briefed as: students will obtain their feedback faster and most importantly using this facility allows them to upgrade their technical knowledge and skills, as technological knowledge and skills are vital and increasing in importance for the students' teaching and learning experience, and prepare them for their employability. Concluding, though blackboard software provides the platform for the online group discussions is a valuable way, yet it still needs further improvements to allow both teaching staff and students have a better experience using this facility, bearing in mind that it is a platform that needs the co-operation of students, teaching staff and technical experts to achieve positive outcomes from the use of blackboard 'e.g. group discussions' or any other facilities that might be and become available through blackboard in the future for improvement of students' capabilities and abilities no matter which unit they are studying, and what mode they are studying at.

References

Alexander, PM 2006, 'Virtual teamwork in very large undergraduate classes', *Computers and Education,* vol. 47, pp. 127 - 47.

Blanchard, AL 2008, 'Testing a Model of Sense of Virtual Community', *Computers in Human Behavior,* vol. 24, pp. 2017 - 123.

Clayton, J 2007, 'The validation of the online learning environment survey', *Ascilite Singapore 2007*, Singapore.

Cook, DA & McDonald, F 2008, 'E-Learning: Is there anythign special about the 'e'', *Perspectives in Biology and Medicine,* vol. 51, no. 1, pp. 5-21.

Demiris, G 2006, 'The Diffusion of Virtual Communities in Health Care: Concepts and Challenges', *Patient Education and Counseling,* vol. 62, pp. 178 - 88.

Fang, Y-H & Chiu, C-M 2010, 'In justice we trust: Exploring knowledge-sharing continuance intentions in virtual communities of practice', *Computers in Human Behavior,* vol. 26, pp. 235 -46.

Green, Sm, Mike Weaver, David Voegeli, Debs Fitzsimmons, Jess Knowles, Maureen Harrison & Shephard, K 2006, 'The development and evaluation of the use of a virtual learning environment (Blackboard 5) to support the learning of pre-qualifying nursing students undertaking a human anatomy and physiology module', *Nurse Education Today,* vol. 26, pp. 388 - 95.

Liu, Y & Wang, H 2009, 'A Comparative Study on E-learning Technologies and Products: from the East to the West', *Systems Research and Behavioral Science,* vol. 26, pp. 191-209.

Miller, MD & Brunner, CC 2008, 'Social impact in technologically-mediated communication: An examination of online influence', *Computers in Human Behavior,* vol. In Press. Science Direct.

Morgan, D 2009, 'Teaching and learning has always been a highly social activity. Technology hasnt changed this. Or has it?', *Learning Technologies Conference*, Queensland

Ottewill, R, Riddy, P & Karen, F 2005, 'International networks in higher education: realising their potential?', *On The Horizon,* vol. 13, no. 3, pp. 138-47. ProQuest.

Robinson, L, Reeves, P, Murphy, F & Hogg, P 2009, 'Supporting socialisation in the transition to university: A potential use for on-line discussion boards', *The Society and College of Radiographers*, pp. 1- 8.

Teo, H-H, Chan, H-C, Wei, K-K & Zhang, Z 2003, 'Evaluating information accessibility and community adaptivity features for sustaining virtual learning communities', *Int. J. Human-Computer Studies,* vol. 59, pp. 671 - 97.

Valck, Kd, Bruggen, GHV & Wierenga, B 2009, 'Virtual Communities: A Marketing Perspective', *Decision Support Systems,* vol. 47, pp. 185 - 203.

Wachter, RM, Gupta, JND & Quaddus, MA 2000, 'IT takes a village: Virtual communities in support of education', *International Journal of Information Management,* vol. 20, pp. 473 - 89.

Weisskirch, RS & Milburn, SS 2003, 'Virtual Discussion: Understanding College Students' electronic bulletin board use', *Internet and Higher Education,* vol. 6, pp. 215 - 25.

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