

Academic Debate on Using Social Networking Media: Teachers' and Students' Perceptions from Two Tertiary Institutions

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Abstract—A number of existing quantitative and qualitative studies have proven that motivation and collaboration impact positively on students' engagement and learning outcomes. Online Social Networking (OSN) is a widely used media that not only offers opportunities for collaboration and motivation but also potential for connectivity and peer feedback for e-learning. Many researchers have explored the importance of OSN sites for e-learning. They have proven that the current e-learning pedagogy supports the use of OSN. However, less research has done on teachers' and students' perception of using OSN. This investigation sought to discover teachers and students perception of using online social networking sites to motivate learners and foster collaboration. Two tertiary institutes were selected for this research from the Melbourne CBD in Australia. A group of students and teachers were invited to participate in this study. All participants were asked to complete a questionnaire. The collected data from the questionnaire survey were analysed through simple statistical. The findings of this research demonstrate that students were more enthusiastic than teachers to use OSN for e-learning. Most of the students' belief, OSN should be included institutionally as an e-learning tool to improve their learning experience. On the other hand, teachers were cautious about the inclusion of OSN into practices. Most of the teachers wanted more control on this media before it gets institutionalize for e-learning. Some of them also worried that it might negatively influence on students' performance. This paper also argues that more research needs to be done rigorously to find teachers' and students' attitude of using OSN sites productively in order to enrich and make effective use of e-learning to achieve the most powerful learning outcomes.

Index Terms—teachers' perception, students' perception, OSN, engage, e-learning

I. INTRODUCTION

Traditional learning is a one-way learning approach where teachers are the prime source of knowledge [1]. In this view, the learning process is generally considered to

be confined to a classroom environment. With the development of technology and mobile devices, learning has become much more flexible and convenient. The use of digital communication devices that provide ready access to information for learning is known as e-learning [2], [3]. E-learning is a great platform that makes learning convenient. At present, Learning Management Systems (LMS) such as Moodle and blackboard are commonly used by tertiary institutes. These systems have been providing valuable services to electronic teaching. However, these platforms do not promote social networking connectivity, personal profile space, informal learning and collaborating spaces which are great techniques to improve e-learning efficiency [2]. In addition, Online Social Network (OSN) sites are Web 3.0 technology which enables information networking between people in order to share and create new forms of social knowledge [2]-[5]. The use of OSN sites for e-learning can positively motivate students into learning. However, others argue OSN sites may not be helpful for institutional learning. It may even be a media that negatively impacts the ability of students to manage their learning time efficiently, thus degrading the value of the learning outcomes [5], [6]. Some teachers' beliefs e-learning is very complex as there are no standard guidelines for using OSN [5], [6]. To begin the process of producing standard guidelines for the use of OSN, it is important to investigate the perspectives of both students and teachers towards the use of OSN in learning. This paper gathered data from students and teachers that were analysed to understand their personal view, satisfaction, and perception towards the use of OSN sites in tertiary education settings. This understanding can help tertiary institutes to use OSN for better learning outcomes.

The rest of this paper is organized as follows. In Section II, we present existing empirical work on OSN. This is followed by sample and data collection methods used in this study in Section III. We present analysis of collected data in Section IV, followed by a detailed discussion on analyzed data in Section V. We conclude this paper in Section VI.

II. LITERATURE REVIEW

Social networking systems are one of the most powerful ways to connect people globally. OSN is a new way to socialize that can also be used as a collaborative learning platform to improve e-learning outcomes. Objective of the online social network is to achieve collective social action by providing global social interaction and connection [7]. Some popular OSN sites are Facebook, Twitter, Myspace, LinkedIn, Orkut and Secondlife. According to statistical data of 2013, Facebook holds leading position in OSN with more than 1.2 billion members [8]. In 2014, this number increased to 1.4 billion [9]. Among youths, 98% have OSN accounts [9]. OSN sites influence youths because of the nature of social networking and opportunities for connectivity. Using OSN sites as e-learning media may motivate students toward tertiary education [2], [10]. OSN offers an e-learning opportunity where one learner can learn from peers along with teachers around the globe [2], [3], [10], [11]. Tony and Lowe [12] conducted an extensive literature review to identify possibility of Twitter as an e-learning media. Their finding shows, Twitter offers significant potential for improving e-learning outcomes. This research suggests, there are many different ways Twitter can be used within teaching for e-learning; however at this stage it is not clear that any one approach is better. Moreno and Molina [13] conducted a theoretical study on the adoption of OSN for e-learning using Unified Theory of Acceptance and Use of Technology (UTAUT). The paper has suggested that use of OSN has a moderating effect on the relationship between the intention to use the platform and its posited antecedents [13]. Furthermore, it pointed out that only effort expectancy and social influence have a significant effect on the intention to use OSN. The paper also concluded that tertiary institutes can benefit from using OSN as it will enable institutes to optimize both e-learning and blended learning alike. Mehmood and Taswir [6] conducted empirical data analysis to determine the effect of OSN on the academic performance of tertiary students in Oman. The analysis of this paper claimed that students have a high scoring response to the use of OSN for writing their class assignments and it also gave them a sense of belonging to take part in an academic community.

Dalsgaard [14] has discussed the pedagogical potential of OSN for e-learning. Dalsgaard approach emphasizes the importance of OSN for construction, production, dialogue and collaboration. Using a theoretical discussion, the paper [14] concluded that OSN for e-learning has pedagogical potential that lies within transparency and ability to create awareness among students. Students' motives and demands are intuitively triggered by various social events. Hedegaard and Fleer [15] have stated that a learner can learn better if a learning environment supports their motives, demands and learning outcomes of the unit. Youths are self-motivated to involve themselves in various OSN sites as they want to make network with friends and family, meet people with same interest and collaborate on various events [14]. Therefore

collaborative learning using OSN can make the learning environment effortless and effective as the use of OSN for e-learning will integrate their self-motivation and demand with learning outcomes. This can be a better way to achieve collaborative learning as students like to learn in their own interest space [14].

According to Bosch [16], students believe lecturers are more approachable after interacting informally via OSN. In some ways this social media can be perceived as a shared space where students can share their common interest. However, in many cases, teacher does not want to involve in Facebook or other social media to keep personal information on their profiles private from students. In [17], the author argues that collaborative social connectivity can be limited in terms of establishing social relationships among teacher and students and may affect the perceptions to each other. Some research also suggests that Facebook or other OSN sites have limited contribution in educational use [18]-[20]. As Madge et al. [20] pointed out that Facebook is social networking site which can only be used to get away from study.

Above discussion confirms that a great deal of research has been done to identify importance of OSN, the effect of OSN on teacher credibility, effect of Facebook on student's academic performance and so on [18]. In addition, collaboration is also emphasized in a theoretical context. While some works have been done to identify factors influencing the importance of OSN for e-learning, very little focus has been given on discovering students' and teachers' perspective on using OSN for e-learning which is an academic debate in contemporary education. The aim of this research is to identifying the views of students and teachers towards the use of OSN for e-learning to engage tertiary learners. For studying this challenging issue, we aim to address the answer of following burning question

What are teachers' and students' perspective of using social networking media in learning process?

III. SAMPLE AND DATA COLLECTION METHOD

In this section, we provide details about the participants of our study and the method of data collection.

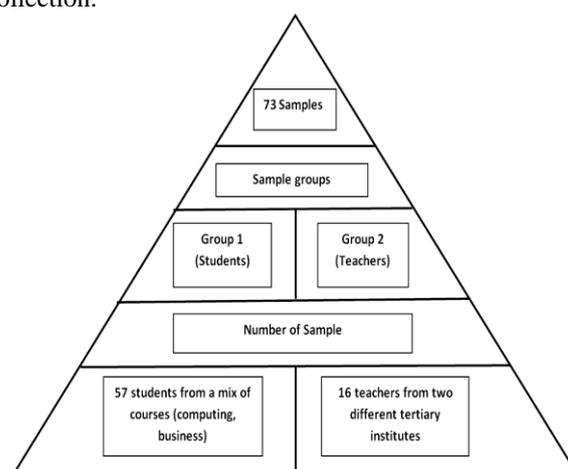


Figure 1. Samples and grouping

A. Sample

Our participants were from two tertiary institutes located in the Melbourne CBD, Australia. Grouping of samples are illustrated through a model of pyramid in Fig. 1. As detailed in Fig. 1, the total numbers of samples were divided into two groups.

Group 1 – There were 57 students who participated in this group who have been studying either in a computing or a business course. Most of the participants (82%) of this group were between 18 and 34 years of age. Members of this group were given the opportunity to use Moodle, Facebook or both discussion forums to get feedback from peers and teachers for an assessment.

Group 2 – Participants of this group were a group of teachers who teach in various tertiary educational institutes. There were 16 teachers who participated in the questionnaire survey. Some participants of this group were casual teaching staffs who teach at more than one institute. They were invited to participate in survey in their convenient time. The participants of this group belong to different age brackets above 34.

B. Data Collection

In this study, the data were collected using a questionnaire (including an open ended question) method from students (Group 1) and teachers (Group 2). The research questions in the questionnaire were carefully prepared to collect relevant data that can capture teachers' and students' perception towards the use of OSN for e-learning. The validity and reliability of the questionnaire was verified by other researchers. There were 15 questions in total (including open ended questions) that were not too time consuming for participants.

The questionnaire survey design was based on relevant literature and suitability of the sample population. Both the questionnaire for Group 1 and 2 were similar.

IV. DATA ANALYSIS

Collected data was first cleaned by eliminating invalid information. The clean data was then summarized to generate categories for analysis. Each sample was anonymously identified by a code. Our data analysis was based on research questions to understand participant's perceptions and opinions toward OSN for e-learning. This analysis also perform comparative study between Moodle and Facebook to better understand participants' perceptions. Simple statistical analysis tools such as percentages, bar charts and pie chart were used to evaluate the perspectives of students and teachers. It was then further analyzed based on established literature of similar research on e-learning.

We first evaluate the popularity of OSN among participants. Our collected data shows that OSN is part of daily activities for most participants. Table I presents OSN sites use frequency of participants (Group 1 and Group 2). We can see from Table I, 98% participants have OSN account or accounts. Popular OSN sites were Facebook and Twitter which were used by 53% and 19% participants respectively.

TABLE I. WHICH NETWORKING SITES DO YOU USE FREQUENTLY?

OSN sites	N	O	M	W	D	Total	%
Facebook	3	10	3	13	69	95	53%
Orkut	39	4		1	1	6	3%
Myspace	36	4	1	3	2	10	6%
Twitter	27	14	6	8	5	33	19%
LinkedIn	26	9	6	4	2	21	12%
Secondlife	19	2				2	1%
others		8		3		11	

(Never=N, Occasionally=O, Monthly=M, Weekly=W, Daily=D)

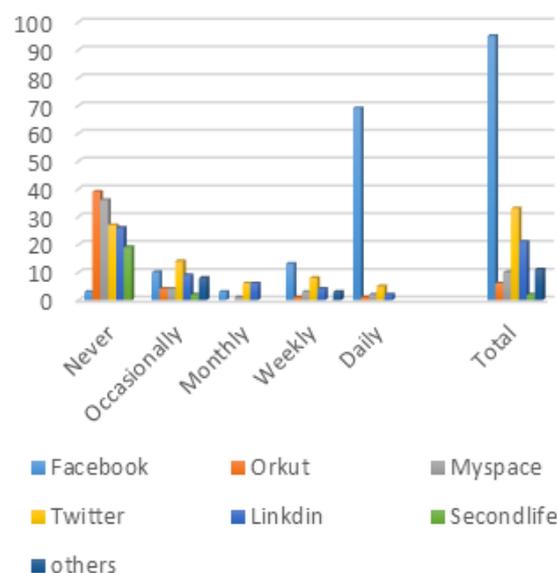


Figure 2. Which networking sites do you use frequently?

The bar graph of Fig. 2 illustrates the participants' frequency of OSN usages. We can see from Fig. 2, 75% of the participants use OSN everyday (once or more than once a day). This result is consistent with the findings of similar research studies [3], [5], [11].

TABLE II. PREFERENCE OF USING FACEBOOK AND MOODLE DISCUSSION FORUM OF GROUP 2

Assignment Discussion Forum	Group 1	%
Moodle discussion	20	35%
Facebook discussion	37	65%
None	0	0

It is important for this research to find out students' preference between Facebook and Moodle for e-learning. Our data in Table II illustrates that the Facebook was used more than Moodle as an assessment discussion forum. The data in Table II shows that 65% of students from Group 1 attended the Facebook discussion forum whereas only 35% joined the Moodle discussion forum. Some of the students from Group 1 joined both forums. However, the survey did not collect data about this.

The participants of Group 2 also selected Facebook as preferable option than Moodle for e-learning. Only 6 teachers from Group 2 preferred Moodle and 7 teachers preferred Facebook discussion forum, rest of the teachers

thought OSN is not an option for assignment discussion or for e-learning. This finding is detailed in Table III.

TABLE III. PREFERENCE OF USING FACEBOOK AND MOODLE DISCUSSION FORUM OF GROUP 2

Assignment Discussion Forum	Group 2	
	yes	no
Moodle discussion	6	10
Facebook discussion	7	9
None	0	0

If we consider data from Table I and Table II together, we can say that majority of participants from both groups prefer Facebook over Moodle as a discussion forum. However, both students and teachers have different degree of acceptance of Facebook over Moodle. In addition, participants of Group 1 showed high interest of using online discussion forum (either Facebook or Moodle) comparatively participants of Group 2.

Fig. 3 illustrates the percentage of participants from Group 2 who believe that Moodle is not a useful discussion tool for collaborative e-learning. Total 63% among all participants of Group 2 think that the Moodle discussion forum was not useful.

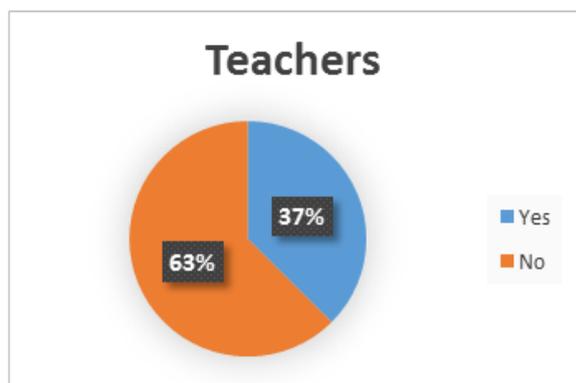


Figure 3. Teachers perspective of the Moodle discussion group

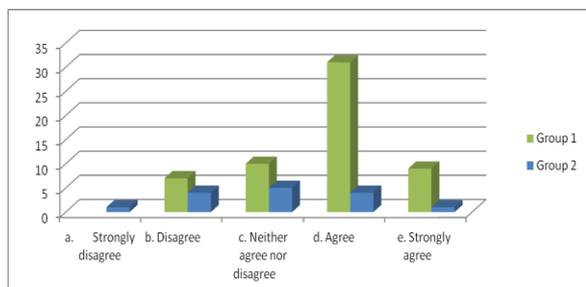


Figure 4. Using social networking media is easy to a solve study problem by discussing it with your peers who live far away

Furthermore participants were asked “Is it easy to solve a study problem by using OSN sites?” We found 54% either agreed or strongly agreed from Group 1 that it is easy to solve study problem using discussion forum on OSN sites. Only 3% had a negative view regarding the same statement. In total, 70% of participants from Group 1 positively believed that it was easy to solve a study problem using OSN sites which is significantly higher than total positive response of Group 2 participants as shown in Fig. 4.

Fig. 5 illustrates participants’ interest level of using OSN sites for e-learning. Overall 52% participants from Group 1 expressed high interest in using it. It is worth noting that the participants from Group 1 showed much higher interest than Group 2 as illustrates in Figure 5. Most importantly, no participants from Group 1 chose option ‘e’ (“not interested”). This certainly indicates they are more likely interested in using OSN sites to make learning easier and to increase productivity.

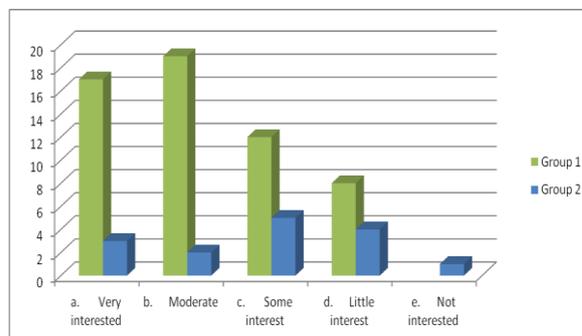


Figure 5. Do you have interest in using social networking sites for learning purposes? Please indicate your degree of interest

Fig. 6 illustrates a noticeably positive response from Group 1 when asked “Do you think social networking sites are helpful for e-learning”. In total 96% participants from Group 1 responded positively on this question. There were no participants from Group 1 who chose option ‘e’ (“not at all helpful”). However, 13% of participants from Group 2 chose option ‘e’ (Not at all helpful).

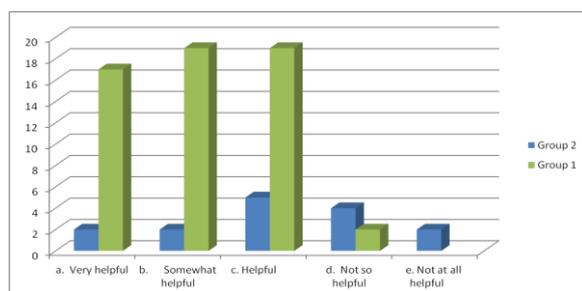


Figure 6. Do you think social networking sites are helpful for eLearning?

The last survey question was open ended and participants were asked “What are better ways OSN can help e-learning?” This question let participants state their views and perspectives towards the use of OSN for e-learning. We have listed almost all opinions, feedback and suggestions collected from this open ended question in Table IV.

Many participants of Group 1 suggested creative and innovative way OSN can be used for e-learning. These feedbacks conveyed their positive attitudes regarding possibility of OSN to enhance e-learning. A large number participants’ from Group 1 suggested that the collaborative learning on OSN provides an informal learning platform which is motivated by social context of OSN.

Participants of Group 1 also noted that the easy accessibility of OSN makes learning accessible round the

clock. Some of them felt that a special group for a specific discussion event can make relevant people (peer, teachers) easily accessible on OSN. Others felt that a standard guideline may help to use OSN sites more productively for e-learning. In a nutshell, participants from Group 1 strongly feel that the OSN should be institutionalize for e-learning to make learning experience more effortless and productive. However, they suggested various learning techniques that need to be evaluated to form a standard OSN user guideline which can influence institutionalizing OSN for e-learning faster.

We have received mix opinion from participants of Group 2 in this open ended question. Although some participants from group 2 showed interest on OSN but others felt that the OSN to improve e-learning is another hype.

For example participants in Group 2 pointed some important issues such as “teaching is really about the content not the media” and “there is a limitation of using OSN in learning”.

The above discussion shows a mixed opinion came from two groups. Many of the participants from Group 1 and 2 gave positive feedback about the use of OSN for e-learning. They also gave some important suggestions and raised questions that may open the door for further investigation. More importantly, both groups gave suggestions to come up with an OSN user guideline to achieve institutional learning process objectives from OSN e-learning.

V. DISCUSSION

After analysis the collected data, we can say that students and teachers have different perspective towards the use of OSN for e-learning. From Group 1, almost everyone has an interest in using OSN to promote interaction and collaboration with others. However, Group 2 gave positive and negative attitude of using OSN in e-learning process. Most of the participants’ (from Group 1 and 2) thought OSN sites have good potential for e-learning. They identified that OSN can be used as a collaborative tool. It has social influence and can be used to share thoughts to facilitate e-learning. The data shows the popularity of using Facebook compared to Moodle as an e-learning discussion board. The participants of Group 2 (teachers) also indicated difficulties using Moodle to enhance collaborative discussion for e-learning. Some participants from Group 2 expressed their concern regarding losing control of the learning process in the near future if OSN becomes a major media of learning. Most of the teachers want to know more about utilization of this media before it becomes institutionalized for e-learning. Some of them were also expressed their concern it might negatively influence students’ performance. Overall most of the participants have a positive view of using OSN sites for e-learning.

We have listed a number of opinions from participants in Table IV that recorded their views of using OSN for e-learning. It also shows a variety of ways OSN might help and assist students and teachers for better e-learning experience. Both groups agree that OSN can play a

supportive role along with traditional Learning Management Systems (LMS) to motivate and engage tertiary learners, in turn, improving learning outcomes. The participants’ opinions in open ended answer might help educational institutes to design effective OSN tools to provide better learning environments that can achieve more productive e-learning.

TABLE IV. STUDENTS’ AND TEACHERS’ OPINION: WHAT ARE BETTER WAYS OSN CAN HELP E-LEARNING?

Group 1	Group 2
<ul style="list-style-type: none"> ▪Make a discussion group ▪Discussion about exams and all the activities of the trimester ▪It is a good way to communicate immediately ▪Sharing notes on Facebook ▪It is very helpful to gather information for the assignment & also for the final exam ▪Sharing ideas about study. How can it be work? We need guidelines ▪Easy access and study while checking Facebook ▪Sharing various study related information from peers and teachers using different discussion groups ▪Exciting to learn things via social networking sites ▪Special groups such as BIS groups and the multimedia group is very helpful ▪It can be a good media to interact with peers and teachers using a special group dedicated to the unit ▪Posting information which is useful for students ▪Discussion about various issues using blogs or posts ▪Easy to find peers and online users to help ▪Clarify doubts regarding lectures and assignments using special group discussions ▪It can be classified by unit forums, university groups, study groups ▪Remote study discussion facility ▪Password protected social networking access while studying online ▪Sharing views, thoughts and ideas using collaborative discussion groups 	<ul style="list-style-type: none"> ▪It would come down to the process completed around the use of sites and how effectively they were communicated ▪ Social networking sites could be used to form groups and thereby we can conduct group assignments which could be assessed ▪Once you discussed with your class mates regarding specific issues/problems and get both the result and the solution - excellent! ▪The technology must remain a tool rather than controlling the way we teach ▪To have an active discussion forum separately so it can be concentrated on students’ purpose ▪It’s really about the content not the media ▪Provide new information but need guidelines ▪Connect and elaborate, so ideas and information can be shared with others ▪OSN may be used to create a community of students ▪Comment with open source material such as MIT (Massachusetts Institute of Technology) open course material and Khan’s Academy ▪Deal with a supportive environment for learning ▪Social networking sites might have a business to consumer model. Incorporating academics in social networking should be very limited

VI. CONCLUSION

The finding of this study shows that OSN sites have the potential to boost e-learning opportunities and satisfaction levels of students. At present, OSN is under-utilized in tertiary level institutes in Australia. This study shows that using OSN for e-learning motivates youth. The use of OSN for e-learning in tertiary institutes will motivate young people towards higher education. The findings of this study suggest that a standard set of guidelines can promote effective use of OSN in e-

learning. As OSN performs supportive roles, an initiative to build a study tool that combines useful features of a LMS and OSN will be an innovative approach. This can also eliminate issues such as privacy and ethics by enforcing appropriate settings. To achieve maximum effect, more productive methods need to be investigated. We also argue that further research needs to be done to establish standard guidelines and to discover the degree of usefulness of OSN method proposed by both groups.

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