Exploring Malaysian Students' Perspectives of Online Social Networking (OSN) Use for Higher Education

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Abstract

The practice of using social technologies for teaching and learning is gaining more prevalence in higher education. In particular, online social networking (OSN) activities, including content generating, sharing, interacting and collaboratively socialising, are enabled by social technologies. Blogs, wikis, social networking sites and podcasts, just to name a few, are entering mainstream adoption and no longer considered as hype. However, using these technologies to keep students engaged with the content, their learning activities and actively interacting among themselves is still a challenge for many academics. We conducted a study involving students in Malaysian universities, to discover how social technologies can be leveraged to enhance student engagement and interaction. The data were obtained from three focus groups conducted in three different universities and each focus group comprises of 5 to 8 students. The study levels include students from their preparatory stage (matriculation) up to masters' level. The aim of the focus group discussion was to explore students' experiences of using social technologies. The data analysis were guided by Activity Theory (AT) to obtain insights into students' perspective on the impact of social technologies on their engagement and interaction in the learning process.

Keywords; Online Social Networking (OSN), Engagement, Interaction, Activity Theory and Focus Group

Introduction

The online social networking (OSN) educational activities are becoming more common as higher learning institutions are now showing considerable interest to the use of social technologies for educational purposes (Mason & Rennie, 2008; Hughes, 2009; Kear et al, 2010). OSN is defined as a range of activities enabled by social technologies and operationalised by a group of people (Hamid et al, 2009). Social technologies referred to in this paper include blogs, microblogs, wikis, social networking sites, video sharing sites, and online discussion boards or forums. The OSN educational activities that are enabled by social technologies include those of content generating, sharing, interacting and collaboratively socialising (Hamid et al, 2010).

There have been a number of studies exploring the use and benefits of OSN for educational purposes (Ajjan & Hartshone, 2008; Arnold & Paulus, 2010; Techehaimanot & Hickman, 2010; Ferdig, 2007; Kabilan et al, 2010). These studies have identified a number of benefits of OSN which include increased student interactions with other students and their lecturers, increased students' satisfaction with the course, and improved students' learning and writing ability. The affordance of social technologies in supporting better student engagement and interaction has also been acknowledged in some studies (Maloney, 2007; Ajjan & Harshone, 2008; Odom, 2010; Roblyer et al, 2010). Nevertheless, there have also been failure cases identified where OSN use does not demonstrate the expected benefits (Cole, 2009). Moreover, while the past studies pertaining to OSN use from the students' perspective are all relevant and useful in furthering our understanding of OSN use phenomenon, many studies do not employ any theoretical lens (Maloney, 2007; Techehaimanot & Hickman, 2010; Odom, 2010). Those studies with theoretical base, generally discuss the phenomenon from the lens of learning theories (Cole, 2009; Kabilan et al, 2010; Ferdig, 2007),

pedagogical approach (Arnold & Paulus, 2010; Roblyer et al, 2010), and the theory of planned behavior (Ajjan & Hartshone, 2008; Zakaria et al, 2010). In addition, the existing literature has not specifically discussed the elements, processes or the dynamic interactions involved in making engagement and interaction occur as part of students' use of OSN for their learning.

To complement the current understanding of the use and benefits of OSN for higher education, the aim of this paper is to explore students' perception regarding the impact of OSN use particularly on enhancing student engagement and interaction This paper employs the constructs of Activity Theory to better understand the elements, processes, and the dynamic interactions that occur during OSN use. We solicited the views of Malaysian university students who are studying in three different universities by conducting three focus group interviews. The students were asked about their experience of using OSN and in particular, how the use of OSN enables them to enhance their engagement with the course and to increase the level of interaction among students and with their lecturers. Therefore, this paper intends to (1) focus our investigation from the students perspective, (2) focus on students who are already involved and have experience in using OSN for at least one semester, hence their views are based on actual experience instead of opinions, (3) focus on the context of Malaysian higher education, and (4) use Activity Theory to explain and to make sense of the research findings.

The paper is organised as follows. First, it provides an overview of OSN use in higher education and the benefits of using OSN, particularly in enhancing student engagement and interaction. The second section highlights the literature on student engagement and interaction enabled by OSN. This is followed by the discussion on Activity Theory (AT) and the applicability of Activity Theory in researching the topic. The description of the systematic data collection and data analysis framed around Activity Theory's key constructs is covered in the fourth section. Discussion based on the findings mapped to the AT constructs is offered in the fifth section. Lastly, the paper concludes with the implications of the research and suggestions for future research.

Using OSN for Enhancing Student Engagement and Interaction

The extant literature concerning the use of social technologies in enhancing student engagement and interaction is useful in shaping our understanding of how OSN should be used for the objectives of enhancing student engagement and interaction. Generally, engagement and interaction are two closely related concepts. For instance, engagement is defined as active participation in class and with the subject matter (Cole, 2009). Thurmond (2003, p. 4), defined interaction as *"... the learner's engagement with the course content, other learners, the instructor, and the technological medium used in the course. True interactions with other learners, the instructor, and the technology results in a reciprocal exchange of information. The exchange of information is intended to enhance knowledge development in the learning environment"*. Hence, in our use of these two terms, we do not differentiate both concepts but rather use engagement and interaction as mutual concepts. In operationalising these concepts, our view of engagement and interaction revolves around students' use of OSN in enabling their active participation in classrooms as well as in constructing their knowledge through active contact with other students, their lecturers, and the technology that they are using.

In further discussing the benefits of OSN use for education purposes, earlier research provides empirical evidence of how the use of OSN has significant potential to support and enhance in-class teaching and learning (Ajjan and Hartshone, 2008; Arnold & Paulus, 2010; Techehaimanot & Hickman, 2010; Ferdig, 2007; Kabilan et al, 2010). Some of the cited benefits include increased student interaction with other students and their lecturers, increased students' satisfaction with the course, and improved students' learning and writing ability. Other studies for example acknowledge the potential of wiki-based application such as Ning to increase the potential for student-to-student and student-to-lecturer interaction outside of traditional class time (Arnold & Paulus, 2010). This view is also supported in Gray, Chang and Kennedy (2010) who claim that the use of social technologies encourages online discussion amongst students outside school. Other anecdotal examples show the use of Facebook in providing the lecturers with new possibilities for reaching their students (Teclehaimanot & Hickman, 2010) and in facilitating students' learning of English language (Kabilan et al, 2010). On a broader base, Ferdig (2007) argues that social technologies promote interaction between individuals, support active learning, social learning and student knowledge construction within a student-centered, constructivist environment. However, a study by Cole (2009) illustrates a different picture by showing the use of Wiki that failed to demonstrate the expected benefits of using wiki to promote student engagement. Nevertheless, the study points out that there are ways to overcome the problem in engaging students with such social technologies, for instance by (a) providing a greater scaffolding, (b) demonstrating the value of wiki as a knowledge repository, (c) properly designing and structuring the teaching and learning module to accommodate social technology use, and (d) providing some forms of interim assessment or informal competition to encourage student involvement (Cole, 2009).

According to Odom (2010), social technologies, by their very nature, are about interaction. For example, the use of blogs, wikis, microblogs and social networking sites provide ample both synchronous and asynchronous interaction opportunities (Odom, 2010). Thus, when such social technologies are used for OSN activities, it can be argued that interaction will occur. Ajjan and Hartshone (2008) and Roblyer et al (2010) claim that interaction has been recognised as key indicators of quality in online learning. The social and interactive nature of social technologies, argued Roblyer et al (2010) would provide the possibility of social technologies to enhance the social interaction with and among students, as well as to increase the quality of engagement in the teaching and learning. The result of the increased interaction and engagement could be that of transformation of students' role from passive to active learners, allowing them to better construct and retain knowledge (Maloney, 2007; Ajjan & Hartshone, 2008).

In the in-depth case studies of twelve learning communities in Europe, Ala-Mutka (2009) found that communication and discussion enabled by ICT and social technologies promote active engagement of members of the learning communities. In another study, Alam (2008) explored the use of wiki and blogs in increasing student engagement and interaction across three universities in Australia, University of Canberra, RMIT and Queensland University of Technology. Feedbacks from the students based on their experience in using the social technologies, among others include positive experience in their interaction with the lecturers through blogs and comments (Alam, 2008). Meanwhile, the use of wiki shows the deep engagement of the students with the course unit and high degree of interaction when 80% of the students found the wiki was moderately useful, useful or very useful in helping the students learn from one another (Alam, 2008). The use of Facebook in enhancing engagement and interaction was studied by Atici and Bati (2010). In their work, a total of 60 students participated in a learners' participation study using social networks for higher education. The students were distributed into experimental group and control group where students in the experimental group were asked to use Facebook. The findings show that the students who participated in online learning via social technology (i.e Facebook) demonstrated a stronger engagement in the course and better interaction with the other individuals in realising the learning process (Atici & Bati, 2010).

In the study of the use of Facebook for learning English language in a Malaysian university, Kabilan et al (2010) provide evidence that such usage of social technology is feasible. They claim that the features of Facebook are able to engage students in meaningful language-based activities and have potentials to enhance student interaction to improve their command of the language being studied. From a broader perspective, Zakaria et al (2010) who conducted a survey of 250 undergraduate students in one Malaysian university discovered that in general, students in the country were well exposed to the social technologies and comfortable in using them for educational purposes. The study further indicates that the students establish better engagement and interaction with the course and their peers but not so much with their lecturers (Zakaria et al, 2010).

Activity Theory to Understand Students Use of OSN

The use of OSN for enhancing student engagement and interaction can be linked to the actual OSN activities performed by the students. As mentioned earlier, the OSN activities could be in the form of content generation, sharing, interacting and collaboratively socialising. For this reason too, we argue that the use of Activity Theory (Engestrom, 1987) is well suited to be used as a lens in making sense of the OSN use for enhancing engagement and interaction. The fundamental concept of AT is that awareness emerges from an individual participating in a social structure where activity incorporating the use of tools to produce objectives leads to socially valued outcomes. The AT model is represented by Engestrom (1987) in the form of a triangle with 6 constructs that he called an activity system. The subject (person) interacts with the community, rules, division of labour, and the tools in activity that is directed towards an object (or objective) and is transformed into an outcome.

In this research context, we will situate and frame the students use of OSN by leveraging the six constructs of AT. We postulate the following:

- Subject refers to the persons or actors whose activities are the interest of this study. The main subjects here would be the students themselves. The other subjects involved in the activity system include the lecturers and the course taught using OSN itself.
- Tool and artefact refer to the technologies and corresponding artefacts related to the students' and lecturers' use of ST in the classroom. In this research context, the tools may include any types of social technologies such as blogs, wikis, podcasts, social networking sites, and etc. The artefacts could include the course assignments, the entry made on wiki, or comments left on blog reflection.
- Community refers to the classroom community as well as those other learning communities that could exist outside the boundary of the university, such as the same course taught in other universities, anywhere in the world.
- Rule refers to the predefined guidelines, instructions or criteria, typically outlined by the lecturers to ensure the conduct of the course and classroom using OSN could proceed with as little issues as possible.

- Division of labour refers to the distribution of tasks set forth by the lecturers, or it can be defined by the students themselves when they are working in groups. Division of labour may include the student-centeredness of the course where students are the producer of their own knowledge while the lecturers are just facilitators in such knowledge quests.
- Object refers to the objective of the OSN use by the students, as intended by their lecturers. In this research, the objectives of the OSN activities are to enhance engagement and interaction as a result of OSN use by the students.

In the following section, we describe the methodology in conducting the empirical work, followed by the discussion of the findings, underpinned by the six constructs of AT mentioned above.

Research Methodology

The data for this research were collected using qualitative method by conducting three focus group discussions in three Malaysian universities in April 2011. The study has gained the human ethics clearance from the researcher's university. Invitations containing the intention of the study and the plain language statement were sent out to lecturers' email who had also participated in the previous phase of this research (i.e interviews with the lecturers in order to gauge the lecturers perspective of OSN use for higher education, reference is withheld for the review process), requesting them to advertise to their students for voluntarily participation. Students who agreed to volunteer were sent the detailed arrangements for the focus group. The focus group took around 1 to 1 ½ hour each. The sessions were held at the students' universities, and mostly conducted in the room equipped with computers and Internet connection. In all cases, the sessions were held without the presence of their lecturers. Permissions from the students were sought to audio-taped the discussion which later were transcribed manually.

The lead researcher facilitated the session by adhering to the prepared focus group discussion protocol. The students were asked several questions, centered on three main issues: their personal and educational use of OSN; the activities and experience of OSN use in classroom – focusing on the interaction; and the outcomes which include the benefits, challenges and opportunities of OSN use. Regarding the study context, there are two main motivations for conducting this research in the localised context of Malaysia. Firstly, the principal researcher has a better understanding of the context as her background is of Malaysian-based. Thus, understanding the culture, social values and language provide the researcher a better engagement with the research context and a deeper association with the research participants. Secondly, Malaysian higher education has started to adopt OSN on a wider scale and young Malaysians are very active users of OSN (Zakaria et al, 2010; Kabilan et al, 2010). Therefore, the Malaysian context offers a good opportunity to explore the phenomenon investigated in this study. The courses where the students use the social technologies are generally the kind of introductory course on ICT in the context of teaching and learning English (i.e Computer Application in English Language Teaching, and English as Second Language Classroom, Resources and Technology). The other course is an introductory course to computer fundamentals (i.e Computing Literacy and Fundamental of Computer Theory). The demographic information of the eighteen students who participated in the three focus group discussions is shown in Table 1 below. For identification and anonymity purposes, the students were identified using their focus group number and their order of seating in the focus group discussion.

*Table 1. Demographic information of the focus group interviews - Note: * International students*

FG No.	Level of Study	Discipline	ST Used/Subject	Age Range	Student ID	Gender	Competency in using ST
1	Degree (Preparatory Program for Overseas Universities)	Engineering & Information Technology	Facebook used for Computer Application in English Language Teaching	< 20 (18-19)	1,1	Female	Beginner
					1,2	Male	Average
					1,3	Male	Average
					1,4	Male	Expert
					1,5	Male	Average
					1,6	Male	Expert
					1,7	Female	Average
					1,8	Male	Expert
2	Degree (Final year)	Education	Windows Live, WordPress and Facebook for ICT in ESL Classroom, Resources and Technology	20-24	2,1	Female	Average
					2,2	Female	Average
					2,3	Female	Average
					2,4	Female	Average
					2,5	Female	Average
					2,6	Female	Average
3	Master (Second year)	Art & Linguistic	Facebook and WordPress for Computing Literacy & Fundamental of Computer Theory	25-35	3,1 *	Female	Average
					3,2 *	Male	Average
					3,3 *	Female	Beginner
					3,4	Female	Beginner

The collected data were manually analysed using thematic analysis (Boyatzis, 1998). All focus group discussion transcripts were printed, read multiple times, and notes were recorded in the margins to identify potential themes. These were then collated, reviewed, and examined for connections and redundancies. Over time, the themes expanded, contrasted and changed as we analysed more transcripts. For this current work, our focus is mainly on the students' experience in their use of OSN focusing on the three areas mentioned above. To mitigate potential subjectivity bias and provide triangulation, the data analysis was reviewed by multiple researchers involved in this study.

Findings and Discussion

We present the findings from the empirical data and mapped them to the constructs of the Activity Theory as discussed below.

Subject: The data related to the Subject construct can be linked to the main actor, namely the students. We discuss the Student subject from the characteristics of the students, whom we can classify as techno-savvy and early adopter. In our study, the use of social technologies for either personal or educational purposes, we found only three out of eighteen students claimed that they were beginners in using such social technologies. Another three claimed they were quite skillful in the use of social technologies and the majority were average users in terms of social technology skills. For the students who exhibited a techno-savvy characteristic, one of them aimed to use it in the future when she becomes a teacher after graduating from the programme:

> *'Although I consider my skill as average, I love technology and I am a techno-savvy person. I hope the skills and knowledge I learn in the university will help me to become a techno-savvy teacher too in the future.' (2,2)*

It is also noted that the students are early adopters of social technologies as most of them claimed to have used the social technologies for personal use prior to their studies at the universities. The tools mostly used by them for socialisation with family and friends include Facebook, Twitter, Youtube and blogs. The students also have preference in the choice of social technologies used although they have no direct influence over the selection of social technologies used by their lecturers for the teaching and learning purposes. From the data, most of them are very familiar users of Facebook having used other social networking sites before such as MySpace and Friendster. However, one of our participants, an international student from China had only started using Facebook as the use of Facebook, is banned by the Chinese government as revealed below.

> *'I am a new Facebook user. I created the account as my lecturer is using Facebook for our class interaction. In my country, use of Facebook is forbidden.' (3,3)*

Tool and Artefact: The findings show that there are a number of social technologies used in enabling OSN activities. In all three focus group discussions, one common social technology the students were instructed to use is Facebook. In two of the focus groups (FG2 and FG3), the students were also asked to use a blog (WordPress). In the second focus group discussion, the students experimented with the blogging capability called Writer available in Windows Live. However, in the middle of the semester, the lecturer asked the students to move their blogging exercises to another platform, WordPress. Nevertheless, the students were still using Windows Live to share files in its SkyDrive function. The decision to use WordPress instead of Windows Live's Writer was a welcome transition as mentioned by one of the students:

> *'We started off with Windows Live. But right now, we are using WordPress. The lecturer asked us to convert our blogs in Windows Live to WordPress which we are quite familiar with and therefore, liked it very much.' (2,3)*

One of the students indicated preference for the new platform over the old one due to its affordances.

> *'Personally I like WordPress better because it is rather restricted in Windows Live. It does not really looked like blog as there are so many other services and products in Windows Live. WordPress is very straight forward and is certainly functioning very well as a blogging platform where we can upload pictures, songs, links, widgets and etc.' (2,5)*

The students in the second focus group are also using a Learning Management System (LMS) called Spectrum and the lecturers encouraged the students to use the chatting function offered in Spectrum and frequently monitored students engagement with the course and interaction among themselves (such as discussion regarding the course assignments) via Spectrum. In the three focus group discussions, normally the lecturer would adopt certain technology as the core supporting technology and the other technologies are just for supplement. For example, in the FG1, the lecturer used

LMS as the main technology and the use of Facebook was secondary in supporting informal discussion. In the FG2, the students were asked to use WordPress as the main social technology while Windows Live and Facebook were two supporting technologies. For the FG3, the main technology was Facebook, supported by blog.

Community: The community in the activity systems of students' use of OSN includes the interaction among the subjects, namely student-student, student-lecturer and student-technology. Under the student-student interaction, the community is built as the result of interaction among students with their course mates. For example, one of the students noted the following:

> *'When we use Facebook, if the lecturer leaves some message or question on the course wall, the lecturer would seem to be in the middle now. We the students leave comments, then comments on the other friends' comments, so it is really a healthy interaction. The lecturer initiated something, then it is up to us to advance the topic through our discussion (via comments) and the lecturer sit on the side, facilitating us where necessary.'(1,1)*

Another student mentioned the sense of community in their use of OSN for the course they are taking and to another student, the use of OSN helped them solve problems effectively.

> *'Basically, we form our own group for the assignments requiring us to do the work in group. I find Facebook as an easy medium to find course mates who are likely to be a good group members based on their fast interaction or feedback when we post something in Facebook. So, I see Facebook is able to provide us the mechanism to interact better, interact with the right persons and in whole, interact more effectively.' (1,5)*

> *'I have an experience from my Python programming project. I once encountered a strange loop where the results came out with very weird and long digit. I cannot solve the problem. What I did was, I use 'print screen', got the screen shot posted on Facebook and then I tag anyone who I think can help me to solve the problems (including the lecturer). I certainly tagged my friends who are good in programming including outside of my classmate. Without waiting too long, a lot of friends and a lot of related people start to explain and ask the question and then help me to solve the problem.' (1,3)*

For the interaction between student and lecturer, the interaction level was said to be of lesser degree. This is because the interaction is less frequent compared to student-student interaction. It is understandable as the lecturers are generally acting as the facilitator, monitoring in the periphery and thus, entrusted the students to communicate among themselves in their quest of 'knowledge construction'.

> *'Beyond class contact hour, the lecturer usually interacts with us using email, or on Windows Live and also on Spectrum. For example, the lecturer would email us on weekly basis to remind us on what we should update on the WordPress and what we will do in the next class.' (2.6)*

> *'I think we have less face-to-face interaction with our lecturer when we interact online.' (2.5)*

The students also interact with the course via the social technology adopted. The tasks the students are expected to do on the social technologies include writing reflections in the blogs, leaving comments on the Facebook wall, and preparing an e-portfolio of course activities for the entire semester.

> *'The activity that we do on the social technology is to write weekly reflection. I think it is a good idea as it encourages to continuously write and improve our writing skills. We soon get familiar as we explore deeper the technology that we are using (WordPress).' (2.5)*

> *'We also give feedbacks to our friends' blog entry. And from our own entries and those commented by our peers and lecturer, at the end of the semester, we sort of developed an e-portfolio of what we have written for the entire semester and how we have progressed from nothing to probably, something.' (2, 2)*

Rules: According to Activity Theory, rules mediate the interaction between subjects and the community. In our study, we found the lecturers would define a set of rules to be adhered by the students. However, in some cases, the rules were not specifically mentioned as the lecturers were using the OSN only as supplementary tool (refer discussion on tool and artifact above). In our previous work, the lecturers would state the inclusion of OSN use in their course syllabus before the semester started or would give briefings during the first contact hour in the semester (reference is withheld for the review process). In some cases, lecturers allocated a certain percentage of marks for OSN activities in the coursework. The rubrics prepared allowed the students to know what they were expected to do and achieve at the end of the semester, particularly those relating to OSN use (reference is withheld for the review process). One of the students illustrated what was expected by her lecturer in the context of using blog for writing their reflection piece:

'Our lecturers are very particular about what we write in our blog. It has to be related to the course and relevant to what we are studying. The language that we use must also reflect that we are writing an academic piece or reflection. I cannot be written in broken English or in text message format. The lecturer is also very strict with the deadlines so we must adhere.' (2, 4)

Additionally, the engagement and interaction level of the students with their peers and the course is stated in the course expectation, contained in the rubric. For example, the course rubric stated that the students would be assessed continuously as part of their use of OSN and their collaborative works with the other students.

'We were asked to write our reflection in our blog every week. The lecturer would access our blogs and evaluate our blog entries for the reflections made. She generally assess us on how we reflect upon the topic, how we reply to the feedbacks given by our peers, and I think on how well we are performing too over the weeks in the semester.' (2.2)

In FG3, one of the students argued that the marks allocated for interaction were quite significant. Therefore, it can be seen that the marks gave them the motivation to interact more frequently but at the same time, the interaction also helped them in learning better as a result of their interactions.

'To assess our frequency of participation in the course discussion, the lecturer would evaluate our level of interaction and allocate about 10 marks. That's for Facebook. However, for our use of WordPress, the lecturer allocated even more marks for active interaction.'(3, 4)

Division of Labour: The mode of teaching and learning using OSN can be seen as focusing more on how the students generate their own knowledge through activities such as generating content, sharing their thoughts, and interacting with the peers while creating knowledge. This kind of student-centered learning is one of the technological and pedagogical affordances supported by social technologies (McLoughlin & Lee, 2010). One of our participants was quite wary when the lecturers asked the class to use OSN as she was concerned that the social technologies were not originally meant for educational purposes, thus, there is potential in "wasting time in socialising" instead of learning using the tools.

'I was reluctant at first to use Facebook for the class. Firstly, I am aware that it will mix up my personal life with those with my lecturer's and the classmates. Secondly, it will take a lot of time to check the status on Facebook wall, to comments and what not, switching from interaction with personal circle of friends with those of course's peers. But now, I find it to be very useful as I learn a lot from my peers too. I mean, from my interactions, I have myself updated with my personal friends as well as I am building my own knowledge through my friends in the course.' (1,8)

The role of lecturer as a facilitating agent during the use of OSN is further reflected in the following narration:

'I never thought that I would need to do extra things. In other classes (those not using OSN), we just attended the class and do the normal assignments or group projects. But in this course, we got to create video, upload them, write story about the video, and then interact with friends about what the video is all about and how it is related to our topic. While it is burdensome to some extent, I can say that I learn more. So, social technology to me is a good platform to educate me how to play my part in creating my own knowledge. We are not spoon-fed as much as before I think.' (2,4).

Object: For our analysis, the object (interchangeably used with "objective" in the AT jargon) or issue at hand is the learning objectives as the results of OSN use, viewed from the students standpoint. There are a number of objectives achieved at the end of the course, mainly better engagement and interaction.

'When we use social technology, I got to share my opinions more freely with my peers. They give me feedbacks and when so many of them giving different views, I got to think and analyse what is actually that I have learnt from all their inputs. I feel I like to learn more of the course, to read more what my friends and lecturer suggested me to find more. I feel more engaged in learning through social technology.' (2,1)

It also promoted critical thinking amongst students:

'When I give constructive comments, I actually think it actually promote my critical thinking as well as I learn from the others. By reading their blogs, I manage to get new insights which maybe on things I've not discovered and experienced before.' (2.3)

The students claimed the use of OSN helped them in discovering new knowledge more conveniently:

> *'One of the benefits is that I could discover more knowledge from the OSN-based classroom. I found myself learning new things from my friends more than what I learnt from my lecturer. Well, I am not saying I am not learning anything from the lecturer, but from my interaction with my friends, I actually learn more beyond what is expected in the course syllabus. It is very convenient too, I don't have to be out there, just being on the Internet, my classmates are all there to learn together.'(3,4)*

Further, one of the students highlighted that they were now able to monitor their learning progress and more aware of their own learning process:

> *'Using WordPress or Windows Live, we can easily monitor and track our learning progress. Because when we first enter the course, we have to write our reflection from Week one and up until now, Week 11. I can clearly see what I have learnt before and the way until now. I can see the progression of my learning.' (2,5)*

One of the participants also mentioned that they were more relaxed and willing in giving their opinions through Facebook. Thus, in this example, the OSN became a medium for introvert students to express themselves better:

> *'I seldom ask questions. I just read selectively and respond to the lecturer's questions only. When we use Facebook, I am more open and I ask more questions. May be because I don't have to bear the embarrassment if I ask silly questions, I don't have to face it like in a lecture theatre. In Facebook, I fell less shy.' (1,7)*

The above discussion is summarised in Figure 1 below.

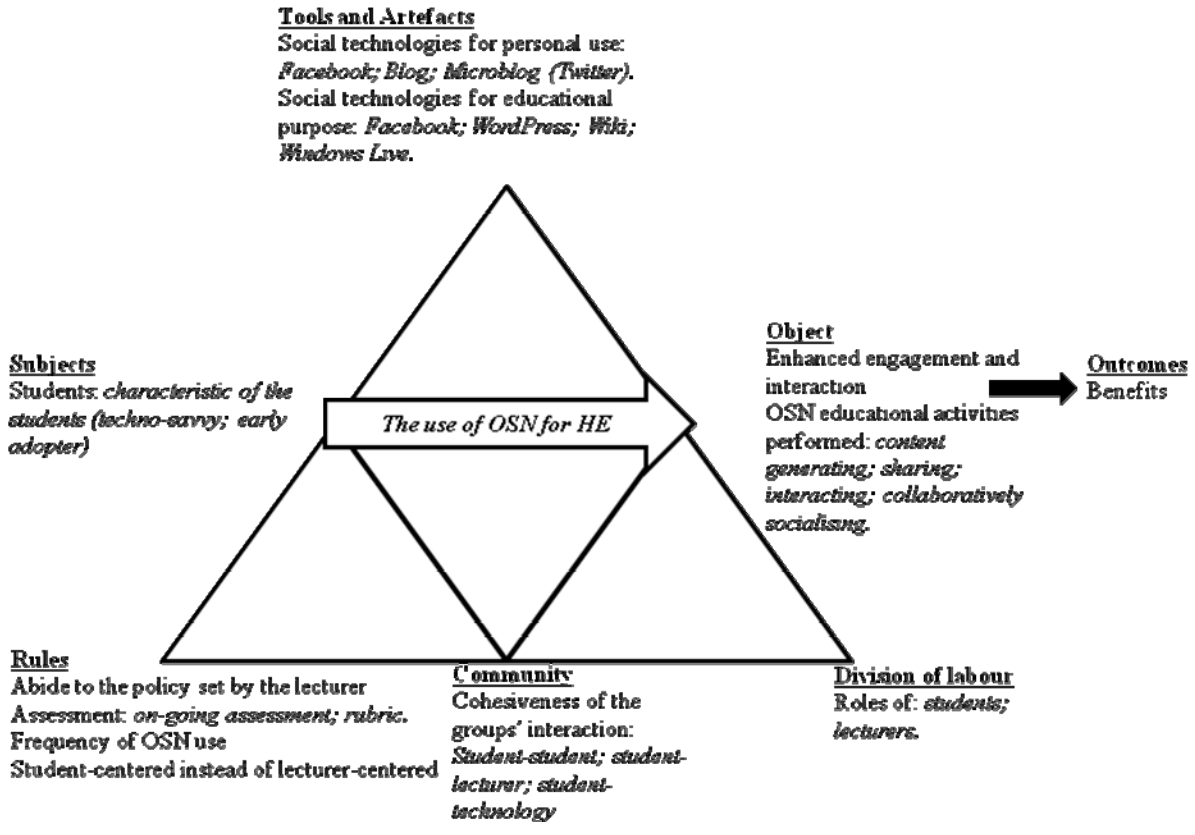

Figure 1: An activity system summarising the use of OSN for enhancing student engagement and interaction.

Other than the benefits, the study also found several challenges faced by the students. For example, one of the students brought up the issue of time management and pressure especially as she had to write blog reflection on weekly basis.

> *'Time management is very important. Updating the blog is not as easy as some people expected. It takes a lot of time to think, then plan to write and then do the actual writing. On top of that, we need to read our friends entries*

too and make comments. While I enjoy doing that, it is pretty time consuming and often, I feel like the lecturers are putting pressure on us.' (2,2)

The findings also found evidence whereby the lack of ICT skills led the students to feel less confident in their use of OSN. Another challenge faced by the students was the limited technical infrastructure provided by the higher learning institution itself.

'The challenge is of course to those people who have no or lack background of ICT. They will find it a little bit difficult and don't have the same confidence level like other friends who are more ICT experts.' (2,3)

'The only problem that I can think of is the poor Internet connection at the lab. If at home, I use wireless broadband which is not too great too in terms of speed and reliability.' (3,1)

Conclusion

In this paper, we have investigated the impacts of the use of OSN on enhancing student engagement and interaction from the students' perspectives. To guide the analysis of the empirical data, the constructs of Activity Theory were employed to help us explore systematically the dynamic interactions involved among students and the lecturers as they use social technologies for OSN activities as well as identify benefits and challenges experienced by the students in the use of OSN. Our preliminary findings show that the participating students were techno-savvy and early adopters of social technologies. This finding concurs with the study by Zakaria et al (2010) which highlight Malaysian's students wide exposure to the social technologies which makes them reasonably comfortable in using these technologies for educational purposes.

We also found that there are a number of social technologies used by the students for both personal and educational purposes. Most of the students who participated in the focus group discussions showed positive inclination towards the use of OSN in facilitating their learning, although there were some concerns raised by the students. The affordances of the social technologies benefited the students in enhancing their engagement and interaction, in promoting critical thinking, discovering new knowledge, tracking their own learning progress and being a platform to be more vocal. In today's changing educational landscape, in particular in the countries with the culture of students preferring to be "spoon-fed" (Ziguras, 2001), we believe that the use of social technologies, to some extent could change this traditional practice of spoon-feeding to those of student-centered. In addition, we have identified a number of challenges that include time management issue, lack of ICT skills faced by some students and limited technical infrastructure in some higher learning institutions. There are also opportunities to be reaped from OSN use that offer the students the much needed improvement in their soft skills and in getting them ready for a techno-savvy workforce of the future.

This study offers important implications to both theory and practice. From the theory perspective, the research contributes in demonstrating the usefulness and applicability of the Activity Theory in understanding the phenomenon of OSN use by students for enhancing their engagement and interaction. From the practice perspective, the findings reported in this paper can be used by practitioners especially lecturers in higher education and even teachers at all levels (primary and secondary levels) in inspiring them into harnessing the social technologies in their quest to enhance their students' learning experience.

There are a number of limitations of this study that offer opportunities for future research. Firstly, the insights obtained are considered as skewed to the perspective of the students only. However, understanding the perception of students is indeed valuable since arguably students are the most critical stakeholders in this context of research. In addition, this study complements our previous study that explores the perception of the lecturers (reference is withheld for the review process). Thus, future research could be conducted to compare the insights obtained from the perspective of students and lecturers, as well as to explore other stakeholders' perspectives regarding the use of OSN for higher education. The second limitation is due to the narrow context of the study in which only Malaysian students are involved. Further studies exploring the same phenomenon involving students from other countries (i.e Australian students) would be useful to enhance the findings of our study. Such richer data would provide us with a more comprehensive understanding of the phenomenon and therefore, provide the practitioners and researchers with better insights into how social technologies can be best leveraged for higher education.

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