

Students' Satisfaction on Blended Learning: A Preliminary Study

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ABSTRACT

This paper highlights students' satisfaction towards blended learning in a tertiary course in Malaysia. Since it is a relatively new area in the Malaysian education system, there is a scarcity of research in this related field. The aim of this study is to examine the students' perception of the blended learning approach conducted in a course in a Malaysian university and to examine future directions in the application of blended learning. A one-to-one interview was conducted with 13 respondents who were chosen for this study. The results indicated more negative than positive responses. However, this should not hinder further implementation of blended learning. This study also discusses several recommendations in this paper.

Keywords: Blended learning, students' perception, future directions

INTRODUCTION

There are benefits of using online learning in many educational courses (Mat, 2000). The major advantage of using technological instructional tools such as online discussion has been widely recognised (Hanna & De Nooy, 2003; Shanaa, 2009). Berge (1995) introduced the use of computer-mediated

communication (CMC). It provides an environment for various opportunities, such as interaction among instructor and students, independent of time and place, besides facilitating the interaction with content. In recent years, Web 2.0 tools such as blogs, wikis, podcasts, My Space, and Facebook have been extensively integrated in the teaching and learning process for the delivery of educational content in various fields, such as dentistry (Salajan & Mount, 2012) and English Language (Warschauer, 2000). Sikora and Carrol (2002) conducted a comparison between fully online learning and traditional face-to-face learning, but the

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result showed that students who engaged in online learning did not differ in their levels of satisfaction compared with those who engaged in traditional learning approaches. The students who engaged in online learning liked to participate in the learning, but the level of satisfaction was not significantly different compared to the level of satisfaction of students who used traditional methods. This was due to reasons like lacking in computer skills, poor quality of online discussion, lack of participation among learners and discussion content that was too broad (Wood, 2010). There were indications that the integration of the technological tools in traditional teaching and learning was an alternative approach to foster students' competencies in learning (Shanaa, 2009). Integrated modes of learning based on different learning environments combining face-to-face learning and online learning is called blended learning.

Blended learning as a concept arose due to the weaknesses and advantages of online and traditional learning approaches. Students who learn in a blended learning environment involve themselves in classroom lessons and also online learning (Tabor, 2007; Farahiza, 2010). Kim (2007) defined blended learning as "the mixing of traditional face-to-face approach with online approach" and Singh (2003) defined blended learning as the combination of two delivery methods, traditional and online learning methods, designed in such a way as to complement or blend with one another to promote learning upbringing.

Blended Learning incorporates online

learning, or as it is commonly known, learning management system (LMS). Many universities in Malaysia have their own LMS. For example, University Kebangsaan Malaysia (UKM) uses SalMas, Multimedia University (MMU) uses MMLS and University Tun Abdul Razak (UniTAR) uses VOISS in their blended learning courses (Goi & Ng, 2009). In University Teknologi MARA (UiTM), the LMS that is used for blended learning is known as iLearn. Since blended learning is relatively new to UiTM, this study aims to determine students' satisfaction in using blended learning in UiTM.

Student satisfaction is important in higher learning institutions since it influences students' response to their learning and impacts their decisions whether or not to remain in their field of study (Roberts & Styron, 2011). Student satisfaction is defined as a certain level of expectations and experiences of a subject or course (Macquarie & Macquarie, 2010). Another definition of student satisfaction is a subjective evaluation of various outcomes and experiences gained based on the students' participation in learning and their campus life (Elliott & Shin, 2002). Universities are paying serious attention to low satisfaction among students because it may give universities a negative image and indirectly affect enrolment at that particular university. This is one of the reasons why student satisfaction has received so much attention recently in academic literature. In terms of blended learning courses, it is important to determine student satisfaction

in using LMS as lower expectations may cause students to discontinue the use of .

Therefore, this study focusses on student satisfaction towards blended learning that is being used in tertiary education in Malaysia. The study was held in University Teknologi MARA (UiTM) in Shah Alam and the targeted students were Master's students who use blended learning. Interviews were conducted as the main method of this study.

BACKGROUND OF STUDY

Blended learning is one effort by educators to promote effective learning strategies in higher education. Blended learning programmes as conducted in different universities vary. However, the programmes are based on a common framework. One of the common frameworks for a blended learning programme is Khan's Octagonal Framework (Singh, 2003). Many higher-learning institutions use this framework as a guide or plan to come up with blended learning programmes in their respective organisations. However, this contradicts what Martyn (2003) has put forth. According to Martyn, there is no structure or framework in blended learning. Thus, it is important to organise a structure which can be accepted by the respective learners. In addition, there is limited research conducted that contributes to the knowledge of blended learning. Nevertheless, some reports indicate that the reasons that many students do not prefer to use blended learning may include insufficient scaffolding; the server is not always accessible; problems with internet connectivity; it is time consuming;

server inconsistencies; tools interaction and stabilities (Blended Learning Institute for Quality Management, 2009).

Currently, educators in UiTM use the blended learning approach in some of the programmes and in some of the courses offered by the university. Since blended learning is new to the education system in Malaysia, not many studies have been conducted to investigate the challenges that can be faced by students who engage in blended learning. Student satisfaction can reflect the challenges faced by students in the blended learning environment. One study that surveyed these challenges was done by Zhang *et al.* (2011). They investigated student satisfaction in order to explore the challenges students faced in blended learning. It is crucial to determine student satisfaction in using blended learning; here, the challenges are highlighted for further improvement and refinement of blended learning programmes.

One of the main challenges in blended learning is the participation of students in the online activity. Despite putting up announcements reminding students to contribute, there are still students who contribute the minimum level of work or who do not contribute at all. Zhu *et al.* (2009) commented that participation rates differ between different cultural groups in e-learning. The cultural background of a learner shapes his or her values, perceptions and goals and response towards e-learning and blended learning. Zhu *et al.* (2009) further stated that American students performed better than their Chinese classmates in an

online learning environment. The Chinese students preferred the teacher-centred approach and they seemed to be more silent, passive, diligent and formal despite possessing sufficient computer skills. On the other hand, the American students seemed to be more confident and accustomed to student-centred online-learning.

Sometimes, participation does not differ not because of cultural influences, but for other reasons such as finding the topics in the forum boring or simply preferring the conventional face-to-face approach. Pape (2010) stressed that not all students may feel comfortable with new learning environments and may prefer lecturers to hand-feed them what they need to learn, instead of finding information for themselves. Brandon (2004) believes that a constructive learning environment should provide a supportive and motivating environment in which learners support each other by providing ideas on certain issues, find solutions to problems and interact with coursemates and lecturers.

Collaborative or cooperative learning plays an integral part of student learning nowadays as the role of the lecturer moves towards facilitating rather than providing information. Dillenbourg (1999) believed that theoretical influences of collaborative learning mainly draw on social-cultural theory put forward by Vygotsky. Vygotsky suggested that social interaction is important for learning because higher mental functions such as reasoning, comprehension and critical thinking originate in social interaction among peers. In order for

groups to cooperate, all members must participate actively by contributing ideas and constructive feedbacks. Unfortunately, this sort of situation does not happen all the time when e-learning is concerned as part of integrated learning. Allan (2007) stressed that students will participate in online activities if they feel that the activities are of benefit to them. As discussed above, some students simply find the topic boring and contribute only the minimum required in order to pass the module. As stated by Wood (2010), some students consider e-learning activities as “page turners” or “a little boring”. Sometimes, when there is an individual sharing knowledge in the forum, there seemed to be no comments or constructive feedback from the others in the group. When these sorts of scenarios arise, it reflects one-way learning. To overcome such problems, it is the lecturer’s role to remind students to contribute to online discussions. Another problem is that some students find that the topics being discussed are criticised but no solutions or alternatives are provided, unlike face-to-face interaction, where the lecturer not only provides a topic for discussion, but also becomes an active moderator at the time of discussion. This is supported by Gunawardena, Plass and Salisbury (2001) who commented that when a lecturer decided to implement online learning alongside face-to-face interaction, it required a heavy time commitment from the lecturer-cum-online instructor.

Thorne (2003) states that blended learning can be a problem unless the individual’s irresponsible provides

infrastructure of appropriate technological support. Lack of internet connectivity does not only affect those who are living in the rural area, but also those living in the urban areas. This could mainly be due to "internet traffic" which happens when there are a large number of users online at the same time. Hence, it is important for lecturers to be more considerate by providing reasonable deadlines.

When a lecturer decides to conduct blended learning she needs to work with the respective IT department in a higher institution which is responsible to ensure the server to upload the content of the module is working well. Hence, the lecturer has no full autonomy towards the e-learning environment. For instance, if a lecturer wishes to conduct an online quiz but cannot do so because the server is down, she might have to run the quiz face-to-face. Graham (2004) highlighted that students and online instructors themselves face technical difficulties in accessing learning websites. These technical difficulties usually involve internet connectivity and server problems. One of the main reasons is limited technology available depending on the strength of coverage which varies according to different places. In addition, connectivity problems may also be due to the individual's inability to afford the best internet connection service. As for server problems, these may happen due to security issues or the server being overcrowded. As such, the technical support system of a university should ensure constant maintenance of the server and should

expand the server's capacity or provide a backup server so the students will be able to log in anytime.

Just as online and face-to-face teaching are recognised as methods of teaching, blended learning is also required as a set of instruction methods with the combination of content development and professional development so that it can be recognised as a new set of teaching methods. Face-to-face and online teaching methods cannot be used interchangeably to deliver lessons. Thorough planning is needed before any teaching method is used. In online courses, since a lot of the content is published on the internet, the content should be first verified for validity by content experts.

The purpose of this study is to examine student satisfaction towards blended learning conducted in a public institute of higher learning in the Klang Valley. Specifically, the objectives of this study are to examine student satisfaction towards blended learning and to examine overall student perceptions of blended learning approaches used in higher education.

The research questions are as follows:

1. How do students perceive blended learning in terms of difficulties?
2. How do students perceive blended learning in terms of advantages?
3. How do students perceive blended learning in terms of the prospect of blended learning?

METHODOLOGY

Students from Semester 3 of the Master of Education (Educational, Leadership and Management) programme were selected as samples for this study. All the students from a class that consisted of 13 students took part in this interview session. The interview session was conducted at the faculty. Before the interviews began, the respondents were briefed on the purpose of the interviews to ensure that the respondents had a general idea of what questions would be asked during the interview. The questions were mostly close-ended with one or two open-ended questions to allow researchers to explore further issues raised by the respondents. The interview session were carried out one-to-one in a private area so as to encourage the respondents to express their thoughts openly and honestly and at the same time to ensure confidentiality of their responses. A set of questions were asked by the interviewer. The interviewee had to respond orally to all the questions asked. The duration of each interview was about 15 to 20 minutes. The sessions were conducted in Bahasa Melayu and English; explanations mentioned in Bahasa Melayu were translated in English before data analysis was conducted.

RESULTS

The findings of the survey reflect the students' perceptions of blended learning components in terms of online learning.

The difficulties/problems/limitations in using blended learning

Eight respondents voiced out their frustration due to slow connectivity and the server being down. When they tried to log in to the system, the internet connectivity was found to be slow and it became worse when the system could not be loaded. Nine respondents stated that they were frustrated when the i-Learn system was down and the broadband or wireless internet connectivity was very slow. Three respondents stated blended learning could be relevant to the learning process but it depended on the subjects and learning tools. Blended learning was not suitable for subjects that involved calculation and technical explanation. Calculation subjects involve formulas and special characters or symbols that were not found on a standard keyboard. Furthermore, technical subjects that involved practicals and that were hands-on were better delivered face-to-face approach rather than online. One respondent stated that the computer or laptop malfunctioned:

Sometimes my computer is affected by virus and the computer is not functioning as it is and sometimes the coverage for the internet access is not available at my place and it is very hard for me to participate in the online discussion.

(Respondent 4)

Another respondent pointed out student attitude and mentality towards blended learning. The respondent claimed that most

students were familiar with the traditional methods that they had been exposed to since their primary school days. Changing learning styles now from the traditional method to blended learning was a huge challenge for them. This interviewee also did not seem comfortable with participating in online learning. Seven respondents stated that the learning environment in the i-Learn portal was boring and confusing. This led to stress and rigid learning. Some highlighted that there was no video or images. Yet, this phenomenon is very much a text-based discussion board. Some respondents who were married perceived online learning as a burden that ate into family time. Three respondents stated that time management was crucial as there were too many posts in the forum to read and respond to.

The advantages of using blended learning

Four respondents stated that blended learning promoted deep reading. Respondents found that they had to conduct some amount of research before they had sufficient information to post in a forum, and this widened their knowledge and deepened their understanding of a subject. In terms of availability, blended learning does indeed promote learning 24x7. Three respondents agreed that blended learning offered convenient all-day-long access to self-paced learning. In addition, five respondents mentioned that this learning approach could be conducted anytime and anywhere as they wished. They claimed there was no need to depend on classes only as they could access information

online. In addition, three respondents stated that all students had equal opportunity to contribute ideas in the forum compared with traditional classroom sessions bound by time constraints. Blended learning also enabled the students to interact with peers in discussing ideas. Three respondents stated that blended learning allowed them to gather more knowledge in particular subjects and indirectly enhanced their ICT skills.

Student perception of prospects of blended learning

When asked about the future prospects of blended learning, two respondents suggested that blended learning would contribute benefits to society. Many advantages could proceed from using blended learning in education, such as that it promotes further reading, acts as a platform in sharing ideas, is accessible anytime and anywhere and enhances knowledge, among others. Therefore, the use of blended learning in the future ought to be encouraged, the students felt. In addition, when the interviewer asked whether blended learning could be infused in the future in the Malaysian education system, all the respondents answered in the affirmative.

DISCUSSION

Interview data revealed three critical factors that affect student satisfaction towards blended learning: a) Difficulties in using blended learning; b) Advantages in using blended learning and c) How students perceive blended learning in terms of the future prospects of blended learning.

Difficulties in using blended learning

Ten of the respondents stated that the forum used in blended learning in Policy and Educational Planning subjects was stiff, boring, not interesting, rigid and too academic. This suggests that motivational practices are important. Interesting educational elements can be considered for inclusion in blending learning programmes. This effort is also encouraged by other educators such as Andres *et al.* (2009). Andrew *et al.* (2009) recommended that “online participation marks” could be awarded to the students when they contributed even a single sentence. In addition, where there is integration of e-learning, students have the opportunity to practise using a variety of features, in particular, software, since the medium of interaction is in written form. For instance, emoticons, different colours, shapes, font and font size can be played with to make student-centred learning more interesting..

Respondent 3 stated that she was stressed when having to use blended learning because the forum interaction was very boring and stiff. During the interview, she stated that:

How I felt using blended learning, I felt stress and so stiff compared to the blended learning that I used in my bachelor time.

(Respondent 3)

Since lecturers, as facilitators, meaningfully engage in online discussion, they engage in the interactive peer learning

of students. Hence, pedagogical strategies in facilitating online discussion are necessary. In addition, various roles that online facilitators can play can be identified to promote peer learning in online discussion fora.

Advantages of using blended learning

Eight respondents stated that the advantage of using blended learning was in its easy access. The materials could be accessed anywhere and at any time. The students could also download materials and notes provided by the lecturer at any time and in any place. Respondent 13 stated that:

I found out blended learning is good and easy especially when face-to-face meeting is one hour and we can do online learning at home.

(Respondent 13)

The students are comfortable with getting involved in obtaining the online materials for their learning. Thus, more related materials should be prepared by lecturers to assist students. The materials will be helpful in guiding the students to explore more related materials. Having content-specific materials that are uploaded by the course lecturers will save students the vast amount of time they would otherwise have to spend looking for materials. Looking for the right materials can also overwhelm them because of the sheer quantity of information available today. There is also the possibility that the students, because of their lack of exposure to the subject, may not find the

content that is deemed crucial or core to the subject. Thus, guided reading is necessary. It will also ensure that students do not leave materials unread simply because there is so much to read. It should be pointed out that these are some of the reasons why students who are well organised in approaching their studies are the ones who succeed in online courses.

How students perceive blended learning in terms of the future prospects of blended learning

All the students who participated in the interviews agreed that blended learning should be incorporated in the delivery of lessons in the future. This could be due to the fact that students see the advantages of blended learning for adult education. Poirier (2010) supports this view when he states that blended learning provides flexibility and convenience to the diverse student population. The use of technology offers advantages to the students especially those who are unable to attend classes due to work, distance, physical disability or being in a different time zone. This is affirmed by Munro and Munro (2004), who attest that the common benefits of blended learning are time saved and reduced travel cost.

Eight of the respondents did not like to use blended learning in their learning process. They preferred traditional methods such as the face-to-face meeting. Respondent 6 expressed that she preferred face-to-face meetings rather than blended learning.

At first I was very excited. I can 100% say that I am very eager to

log in to join in the forum...but at one point I feel kind of lost... Based on the topic itself, based on the ideas given by the other users and based on the experience, based on the course itself, some courses might be very helpful when using blended learning and some courses are very dull when using blended learning. That is why I prefer to be in face-to-face rather than online mode. I think I am more productive when talk to people directly.

(Respondent 6)

Some of the students recommended that blended learning be used in higher learning but not for all subjects. Some suggested that blended learning ought to be incorporated in the delivery of lessons as early as the primary-school years.

Not all the subjects can be implemented in blended learning modes. In terms of subjects such as logic thinking, critical thinking, where the subject are not too much on practical like science and math, these type of subjects can apply blended learning. But for science and math I don't agree in using blended learning approach.

(Respondent 5)

RECOMMENDATION

There are difficulties raised by the respondents such as the server being down and connectivity issues. These issues are

common grievances that have also been highlighted by other researchers. For instance, in Mungania's (2004) study, 88% out of the 875 respondents reported experiencing server and connectivity issues. As these two difficulties are common problems in online learning, they should be addressed by the online-learning developer first before any online modules are launched. This will ensure smooth flow of the programme.

In order to obtain a more varied sample, it is recommended to choose more respondents from other courses or faculties or local universities who participate in blended learning. As supported by Bollinger and Martindale (2004), replicating a study with a larger sample in the future will help to validate the findings of a study. Besides obtaining a more varied sample, the study should also be done in quantitative research mode. Varying the research mode will assist researchers to compare and contrast the results to provide a wider picture of students' perception of blended learning.

The next recommendation is to start blended learning from young. Mindset plays a vital role in acceptance of change. This is supported by Arbaugh (2004) and Flower et. al (2008) who stated that students with previous exposure to e-learning settings were more likely to express greater satisfaction. As mentioned by one of the respondents:

I prefer face-to-face interaction because since young we are exposed to that type of learning method.

(Respondent 4)

Since blended learning is relatively a new teaching methodology, it is essential for the instructor and students to obtain feedback from time to time in order to make improvements as and where needed. This is supported by Andrew *et al.* (2009) who stated that continuous feedback on blended learning helps to improve the system and simultaneously increase student participation and interest in blended learning. Research should also focus on student adaptation to different learning styles with the implementation of blended learning. Inevitably, with the implementation of blended learning, students need to integrate e-learning with their conventional face-to-face learning style. Adult learners who are comfortable with face-to-face learning may find it a great challenge. Hence, such a study would be beneficial to guide and assist adults who are engaged in or will be engaged in blended learning. As Singh (2003) elaborated, blended learning has the potential to balance out and optimise the development of learning programmes.

FURTHER RESEARCH

Further study in this area should look into instructor perception of blended learning. This is to facilitate a compare-and-contrast study to explore the advantages and disadvantages of blended learning for lecturers and students. Besides looking into instructor perception, materials or content chosen for inclusion in hybrid learning plays a vital role in determining student involvement in a course (Farahiza, 2010, Dalsgaard & Godsk, 2007). The focus of

materials should facilitate individualisation to allow students to work in different ways with different materials, depending on individual understanding. Hence, for future study, it is recommended that materials for further improvement of blended learning be explored. In order to successfully implement a methodology or teaching method and to create materials for a particular course, a carefully planned and organised framework is pivotal. Such frameworks are presently available as have been published in several overseas journals. However, to suit the Malaysian context, these frameworks, if used, would need to be adapted to suit the learning style and mindset of Malaysian students as well as the courses they tend to prefer. The website of the North American Council for Online Learning and the Partnership for 21st Century Skills (2006) states that the best framework or model is one that works best for students and instructors in the particular environment and which addresses their specific needs at any one time.

Having a good framework for blended learning is essential to ensure students are satisfied and achieve good grades. This leads to the next recommendation, which is to conduct a study on whether there is significant relationship between student achievement and blended learning. Student achievement plays an integral role in the teaching and learning process. No doubt, good student achievement helps to increase the instructor's reputation as well that of the institution. As such, university management should encourage more lecturers to apply

blended learning as the main teaching method of their institution. When the management of a university take such efforts to implement more blended learning courses, they will also open opportunities to students to familiarise themselves and be comfortable with blended learning.

CONCLUSION

This study has provided insights on the advantages, disadvantages and future prospects of blended learning from the view point of a group of Malaysian students who are pursuing their Master's degree in a local Malaysian university. The discussions have been directed to view the prospects of blended learning for future implementation. The bright prospect of blended learning is concerned, then some others pedagogical issues should be concerned for the implementation of blended learning approaches, such as the structure of making up environment of dominantly asynchronous and partially synchronous mode, in terms of the student attendance at face-to-face learning sessions. On the other hand, the design and delivery of course content are the main focus of the learning. Although the researchers discovered that there were more negative responses compared to positive ones in student perception of future use of blended learning, this should not hinder further implementation of blended learning.

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