INTRODUCING BLENDED LEARNING PRACTICES IN OUR CLASSROOMS

N. L. Win[1], S. D. Wynn[2]

[1]Department of Civil, Faculty of Engineering, University of Nottingham Malaysia Campus, Semenyih, Malaysia

[2]Faculty of Business, Communication and Law, INTI International University, Putra Nilai, Malaysia

[1]*NiLar.Win@nottingham.edu.my*, [2]*san.darwynn@newinti.edu.my*

Abstract

Blended learning has been received great interest in higher education around the world since it can increase access and flexibility for learners, increase level of active learning and achieve better student experiences and outcomes. Blended learning becomes popular to Higher Education Institutions community in Malaysia since a number of public and private universities were committed to bring the blended learning approach in their teaching and learning activities. Medium-impact blended learning has been used in BEng in Civil Engineering Programme, Bachelor Degree in International Business Programme and UK Degree Transfer Law Programme at INTI International University, Malaysia. Teaching techniques used in our classrooms were raptivity, flipped classroom and assessment and rubric on blackboard. The objectives of this study are to provide information on a variety of learning and teaching strategies that used in engineering and law subjects to support blended learning and to find out the perception of students on blended learning practices introduced in their classrooms. As for an academic, more initial preparation time is required to design a suitable blended learning model. Based on the response from the students, about half of the respondents neither agreed nor disagreed with the statements for contentment with blended courses. About 25% of the respondents would like to have more blended courses. It may be concluded that most students were not comfortable with online activities and they still preferred the traditional classes although blended learning has the proven potential to enhance the effectiveness and efficiency of meaningful learning experiences.

Keywords **-** blended learning, raptivity, blackboard, flipped classroom

Introduction

Blended learning has been received great interest in higher education around the world since it can increase access and flexibility for learners, increase level of active learning and achieve better student experiences and outcomes. Blended learning becomes popular to Higher Education Institutions community in Malaysia since a number of public and private universities were committed to bring the blended learning approach in their teaching and learning activities.

Several definitions of blended learning are available in the literatures. According to University of Western Sydney (2013), blended learning refers to a strategic and systematic approach to combining times and modes of learning, integrating the best aspects of face-to-face and online interactions for each discipline, using appropriate information and communication technologies (ICTs).

Pankin et al. (2012) pointed out that blended learning can be implemented using different learning methods (lecture, discussion, games, case study etc.), different delivery methods (face-to-face instruction, flipped classroom or computer based learning opportunities) and different level of guidance (individual, lecturer led or group learning).Embi et al. (2014) stated that the course must be reviewed to include blended learning elements such as flip teaching/learning and collaborative learning to improve students' active learning and satisfy the requirements of industry and profession.

Today, the 'Flipped classroom' method is being implemented increasingly around the world in various dynamic and creative ways from primary, secondary to tertiary education (Faculty Focus Report, 2014).

As we explore the use of blended learning, Garrison and Kanuka (2004) recommended that to assess and evaluate its effectiveness with respect to learning outcomes, student satisfaction, retention and achievement. Since a variety of interesting classroom activities was used in our classrooms, the objectives of this study are to provide information on a variety of learning and teaching strategies to support blended learning used in engineering and law subjects and to find out the perceptions of students on blended learning practices used in their classrooms.

Methodology

Medium-impact blended learning replaces activities in an existing course (defined by Alammary et al., 2014) has been used in Open Channel Hydraulics and Water Engineering in the BEng in Civil Engineering Programme (January and August 2014 sessions), International Trade Law in the Bachelor Degree in International Business Programme and Public International Law and Company Law in the UK Degree Transfer Law Programme since 2013, at INTI International University, Malaysia.

Teaching techniques used in our classrooms were Raptivity, flipped classroom and assessment and rubric on blackboard. "Raptivity is a fine crafted builder that offers a rich collection of 190+ templates for creating e-learning interactions, quick and easy, absolutely without any programming" (http://www.raptivity.com/). The template ranges across various categories such as games, simulations, brainteaser, interactive diagrams, virtual words and many more. A number of games from raptivity are used to design a blended learning course to create more face-to-face interactions in our classrooms.

Flipped classroom describes a reversal of traditional classroom where students expose the materials outside of the classroom usually via reading articles or watching lecture videos, and class time is used to do the harder work such as homework or assignment.

Blackboard is a platform for e-learning which provides online tests, discussion boards, reflective journal, assessment and rubrics for assessment and others. In this study, multiple choice questions, true or false questions and rubrics are designed for assessment on blackboard so that students can test their knowledge on the particular topics.

This study employed a survey approach using a seven-scale questionnaire (from strongly agree to strongly disagree) to assess students' perceptions on blended learning. The questionnaire consists of six questions regarding time management, self-pace and contentment in the activities. Law students from the author's classrooms were given the questionnaire for their views on blended learning since they have experienced these practices in three or more classes. They were considered as the pioneers in experiencing a new approach since the university has recently introduced blended learning in selected courses. Therefore, descriptive statistics is used in this study since the entire group of students was considered as a whole population. In the near future, authors will work with samples rather than a whole population when random sampling becomes possible.

Results

Raptivity

In order to trigger an interest of students, games provided by raptivity are suitable and reflect their challenging life style. Among others, games such as Sticky Notes, Wheel of fortune, Graphic Choice, Crossword puzzles, Find-hidden-picture, Match, Catch-them-fast, Hierarchy, Answer-or-deal were given as examples in this study.

One of the useful templates from raptivity is Sticky Notes. It is especially useful for students to be familiar with new terms in the topic. It was used in teaching law subject to non-law students. This is deployed in International Trade Law for business students who are not familiar with the terms like carrier, shipper etc. Students preferred to read the material provided in this game (see Fig. 1) rather than reading from traditional lecture notes or text books.

Wheel of fortune is a popular game in daily life of our society. By playing this game, students were having fun and learning at the same time. For student's excitement, different topics from Public International Law but they are related to each other were combined for this exercise. Students were asked to answer multiple choice questions on important areas of the selected topics. Example of Wheel of Fortune is shown in Fig. 2. It helps students to understand the basic principle of the topics.

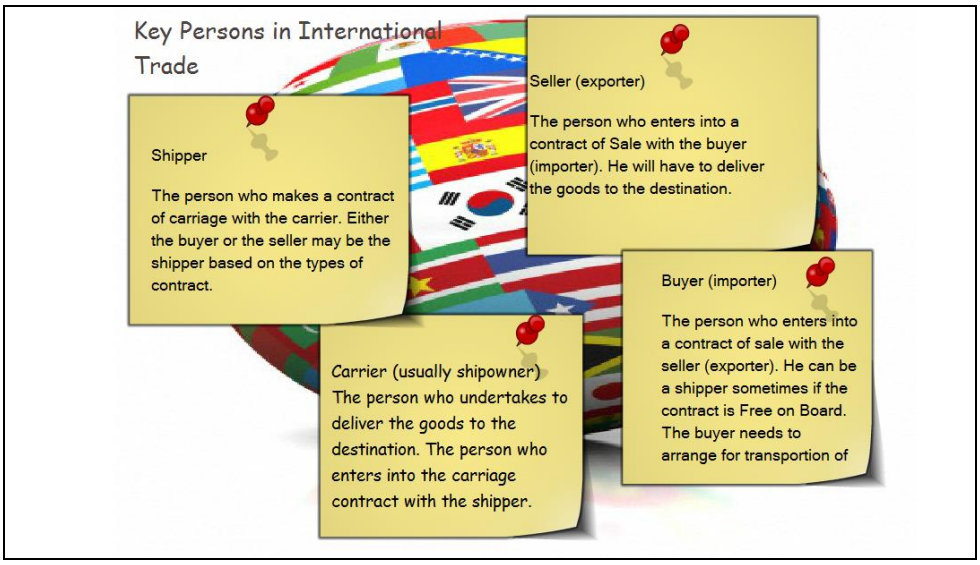

Figure 1. Showcase of Sticky notes used in International Trade Law

Figure 2. Showcase of Wheel of Fortune used in Public International Law

Since generation 'Y' and 'Z' prefer visualisation, Graphic Choice – multiple section game on raptivity is the right tool for students. After discussion on the coverage of the cargo in three governing rules: common law; Hague-Visby rules; and Hamburg rules in Carriage of Goods by Sea, students were asked to answer the additional cargo coverage by Hamburg rules with the help of the template created by the instructor. Students were excited to choose the first and second pictures since they represent on-deck-cargo and live animal (see Fig. 3).

Figure 3. Showcase of Graphic Choice used in International Trade Law

Find-hidden picture game is one of the appropriate games for students to have a grasp of unfamiliar subject like Public International Law. First week of the semester, students were asked to watch a documentary video on "International Law" and played a hidden picture game as shown in Fig. 4 so that students have a basic idea of the subject before attending the first lecture.

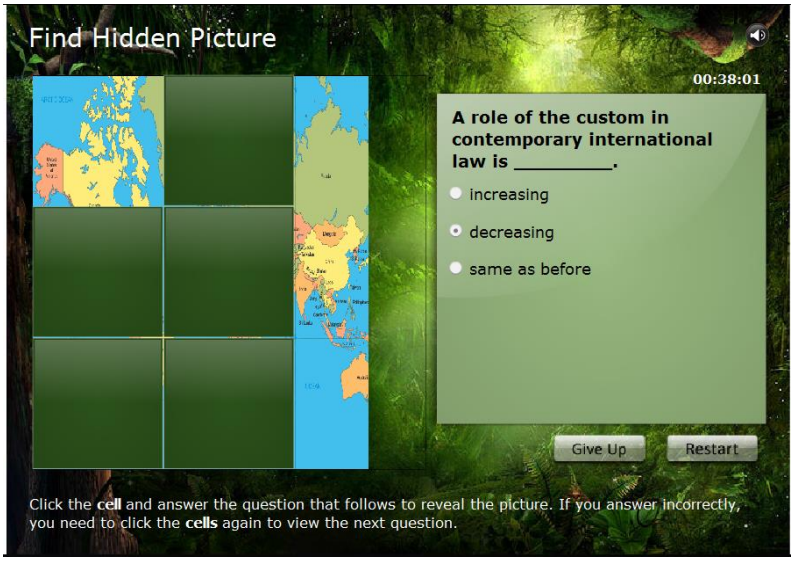

Figure 4. Showcase of a Find-hidden-picture game used in Public International Law

Raptivity also provides a template for Crossword puzzle. If instructors don't have a raptivity software, crossword puzzle can be created by using the following link 'http://www.theteacherscorner.net/'.Instructor can create crossword puzzles to help the students to be familiar with terminology and spelling. Students have the opportunity of using the puzzles

for their learning. Figure 5shows the Crossword Puzzle used for Company Law. Crossword puzzle is used to design for the civil engineering students from the topic of dams in Water Engineering. Students were excited since it was their first activity in their learning.

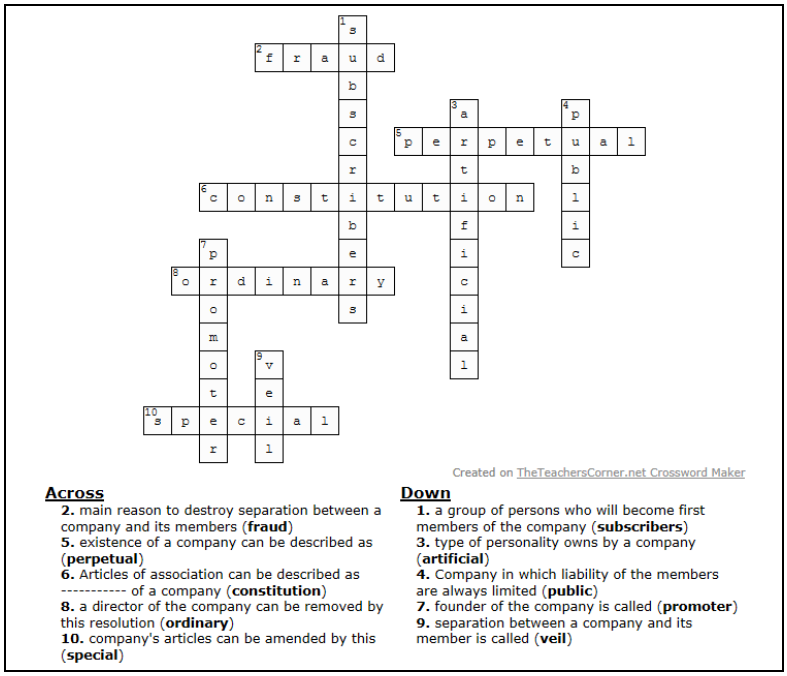

Figure 5.Showcase of Crossword Puzzle for Company Law

Catch-them-fast game is an exciting game for students to understand the duties of the shipper. Students were allowed to make multiple attempts while playing games to remember the contents. Figure 6describes the showcase of Catch-them-fast game used in International Trade Law.

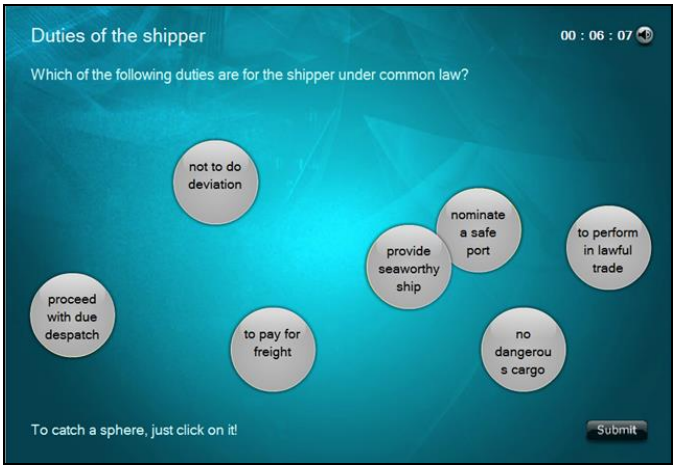

Figure 6.Showcase of Catch-them-fast game used in International Trade Law

The game called 'Match' is very much appropriate for understanding the complex principles in Use of Force in Public International Law. Students practiced these principles such as humanitarian intervention and collective use of forceby matching the terms and descriptions (see Fig. 7).

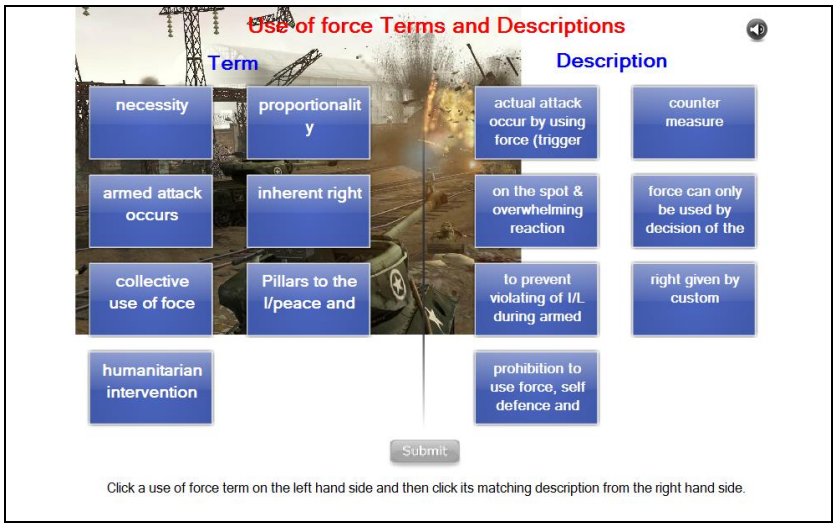

Figure 7.Showcase of Match used in Public International Law

Another interesting template provided by raptivity is Hierarchy game. It is used for students to understand the sequence of the document involved in the international trade for the shipper to prepare. Figure 8provides the showcase of Hierarchy game used in International Trade Law.

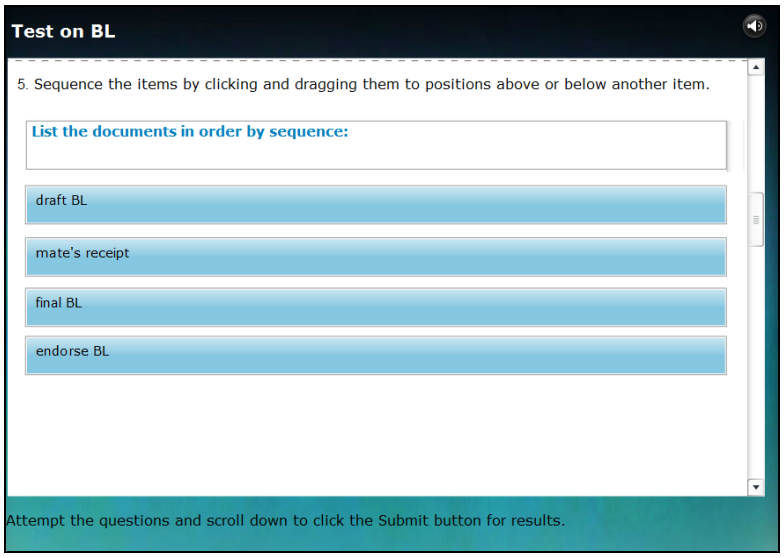

Figure 8. Showcase of Hierarchy game used in International Trade Law

Answer-or-deal template as shown in Fig. 9 was designed to introduce different types of dams to civil engineering students. Most of the students obtained all correct answers without taking an offer since they wanted to play well.

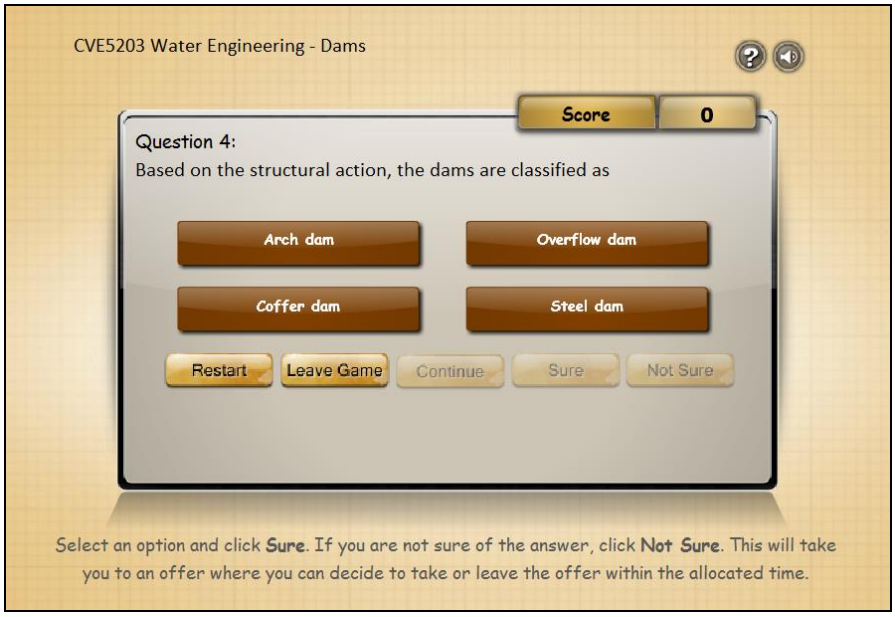

Figure 9. Showcase of Answer or Deal game used in Water Engineering

Flipped classroom

Flip classroom is the one of the preferable methods in blended learning. Students were asked to watch a video or read a journal article outside of the classroom. Then discussion on the assigned task will be taken place in the classroom. It is used for the topic of International Law in Public International Trade Law. A video on the lecture delivered by famous professor is uploaded from you tube on blackboard for students to watch it outside of the classroom. Then assignment on the topic was discussed during the class.

Flipped classroom was also used in civil engineering programme. Students were asked to study different topics in Water Engineering which were uploaded on blackboard outside of the classroom. In class time, each group presented the given topic and followed by the discussion on the problem solving given in the assignment. Students were content with their own learning. This activity enhanced "an ability to communicative effectively", "ability to function on the group work" and "ability to show life-long learning" which are required criteria set by Engineering Accreditation Council, Malaysia.

Perceptions of students on blended learning

The questionnaires were given to law students and 51 students responded. Analysis is carried out on the responses obtained from 25% of male students and 75% of female students. A majority of respondents were Malaysian (88%). International students came from Mauritius and Nigeria.

About ninety percent of the respondents were between the ages of 19 and 21, with 10% were older. Students' perception on blended learning is shown in Fig. 10. It is observed that about 50% of the respondents were neutral for the first three items shown in the figure below. About 25% of the respondents supported the blended learning since they felt to have more blended courses. However, more than half of the students agreed that they could organize their time better and they could control their self-pace. More than 40% of the students would like to spend time in classroom setting rather than spending time online.

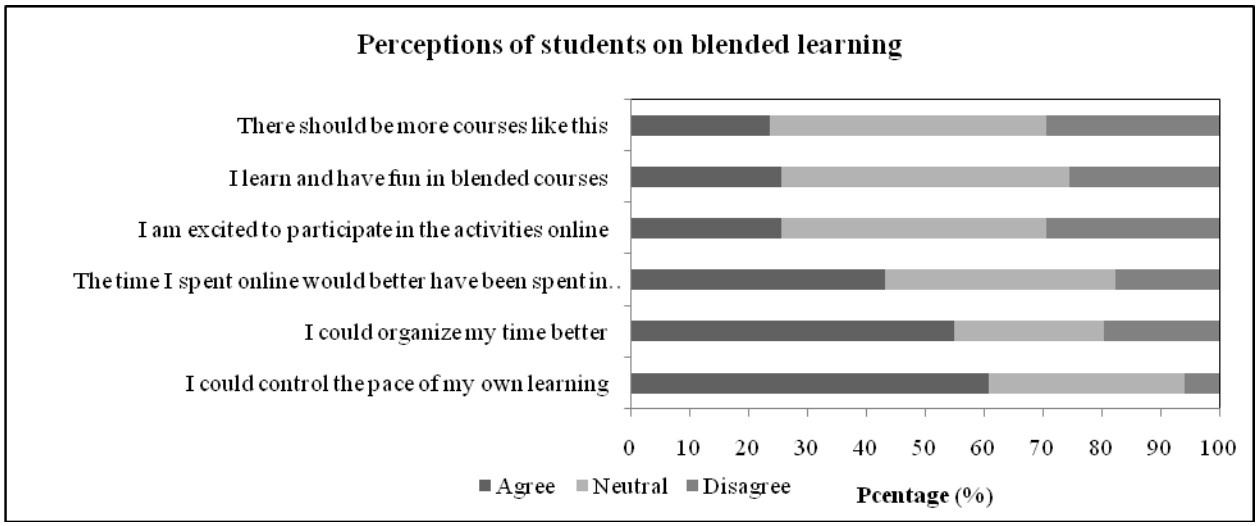

Figure 10. Perceptions of students on blended learning

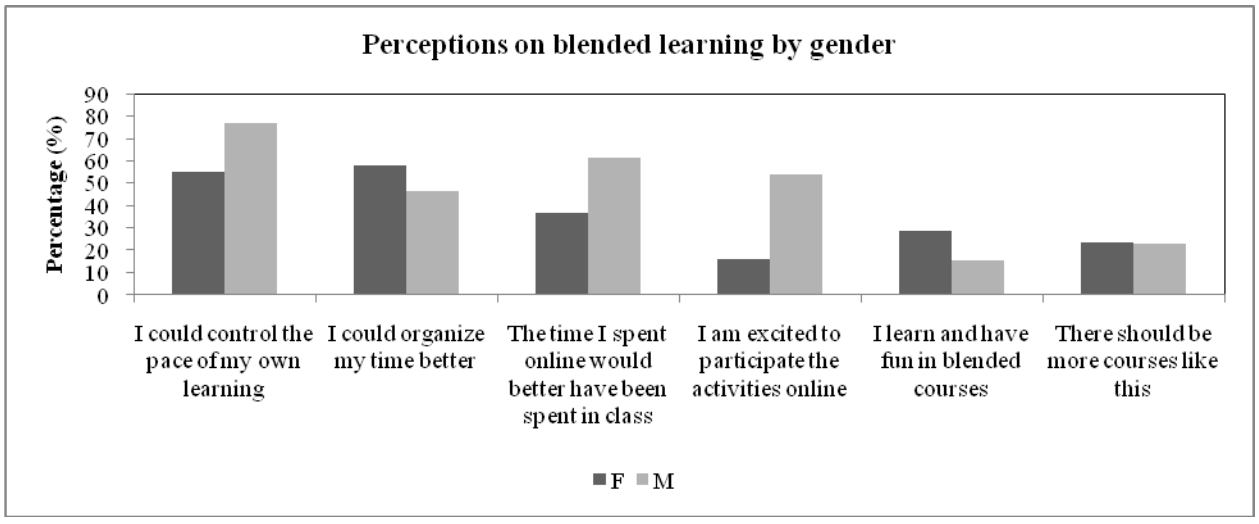

Figure 11. Perceptions on blended learning by gender

Figure 11 shows students perceptions by gender on the scale of 'agree'. It can be seen from the figure that male students felt that they would like to spend time in the class as compared to female students. However, more than half of male students were excited to participate in the

activities online. This was not the case for female students but they have reported that they had fun and learned in blended courses. Only about 25% of both genders would like to have more blended courses.

Conclusions

A number of learning activities using raptivity, flipped classroom, assessment and rubrics on blackboard were introduced in our classrooms to enhance blended learning. Based on our experiences, more initial preparation time is required to design a suitable blended learning model. However, students received the feedbacks on the assessments quickly through computer based technology.

Based on the response from the students, about half of the respondents were neutral regarding the contentment with blended courses. About 25% of the respondents would like to have more blended courses. It may be concluded that most students in the analysis were not comfortable with online activities and they still preferred the traditional classes. It may be the reason that blended learning has recently started being implemented in INTI International University as well in Malaysia. Students may need more exposure and time to adapt to the new approach of learning to be able to appreciate the benefits of blended learning. Therefore, the university offers students' readiness module on blended learning to new students since blended learning has the proven potential to enhance the effectiveness and efficiency of meaningful learning experiences.

It is recommended that a random sample of data be taken from a population to describe and make inferences about the students in the university.

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Useful online resources:

http://www.raptivity.com/

http://www.theteacherscorner.net/

Biograhical Notes:

Dr. Ni Lar Win is an Associate Professor at University of Nottingham Malaysia Campus, Malaysia. Her B.E (Civil) was from Rangoon Institute of Technology, Myanmar, and her MSc and PhD are from Free University Brussels, Belgium. Her research interest is in water resources engineering, engineering education and women in engineering.

San Dar Wynn is a Senior Lecturer at INTI International University, Malaysia. Her Bachelor of Law (LL.B.) and Master of Law (LL.M.) were from University of Yangon, Myanmar. Her research interest is in International Law, Institutional Law and Blended Learning.