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THE EFFECTIVENESS OF USING BLENDED LEARNING (i-LEARN)

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ABSTRACT

Blended learning in general is a program that designed for students which is combination face-to-face and online learning. The aim of this study is to investigate the effectiveness of using blended learning (i-Learn) among students in UiTM Melaka. An online questionnaire with 11 items at demographic section and 20 items was designed to evaluate the aspect of blended learning. The study involved of 200 respondents of UiTM Melaka which are from Alor Gajah, Bandaraya Melaka and Jasin campus by using Google Form platform. The amount of survey calculated based on Krejcie and Morgan Table, N=210, S=132. There are three elements designed in the research to measure the effectiveness of using blended learning (i-Learn) among students in UiTM Melaka which are time management, study achievement and social interaction. All variables were measured through scales previously used by other researchers. SPSS ver. 20 software was used in the analysis and the results of the SPSS indicated that the main factor of using blended learning is time management (M= 3.08).

Keywords

Blended learning, i-Learn, Face-to-face learning, Online learning

INTRODUCTION

Today, rapid improvements at ICT (Information and Communication Technologies) as they affect every other area, they also influence and change the educational field. As a result of those changes, new approaches towards learning and teaching processes have come to the fore. Online, e-learning, m-learning, b-learning definitions are some of the expressions emerged in

consequence of these approaches. According to Driscoll et.al., (2002), in various sources, blended learning can also be used as blended, mixed or hybrid. When accessed in terms of information transfer and interaction methods, blended learning is to combine the positive sides of online and conventional face-to-face learning methods. Finn and Bucci, (2004). He also stated that the body of literature on blended learning proves that there is no unity on the definition of blended learning. On the contrary, Delialioglu and Yildirim, (2007), claimed that systematic and strategic combination of ICT tools into academic courses introduces a new way to approach instructional goals. This instructional method has been given many names: blended learning, mediated learning, hybrid instruction, web-assisted instruction or web-enhanced instruction. They believed that blended learning is the same as hybrid instruction, which combines the potentials of web-based training with those of classroom techniques.

Nowadays, more and more education establishments are coming to rely on the blended learning model. Each student has a range of different strengths and requirements and a blended learning approach allows tutors to acknowledge this. When they are given the ability to use tools from both traditional and digital spheres, tutors are able to present necessary information in a range of different ways designed to suit the varying learning styles of their students.

Blended learning is defined as a formal education programmed that is made up of in-person classroom time as well as individual study online using e-learning software. It is a type of multichannel method that incorporates tutor-led activities, images, video, digital tasks and face-to-face discussion. Blended learning is simply the integration of technology into the curriculum. Whether students are utilizing digital media to gather information or computers to complete assignments, the actual combination of technology and the curriculum is the hallmark of blended learning. It includes delivery methods through which students learn from a digital source, the use of online classrooms and discussions, identifying gaps in knowledge by using automatically corrected assignments and computer mediated activities.

PROBLEM STATEMENT

This research will determine the benefits of blended learning towards the students in UiTM Melaka. Most students have not familiar with the use of blended learning (i-Learn) so they are having difficulties to access the online portal. Students need to have a good internet

connection before accessing to the online portal. They also need to be punctual when the test and assessment is given by the lecturer through the portal.

According to Dembicki, (2011), blended course offerings have been on the rise in community colleges over the last decade of research, no universal definition of the term “blended learning” has emerged.’ While according to McGee and Reis, (2012), they stated that at its most basic, blended learning combines elements of face-to-face and online modalities regarding content and delivery which explain that the concept of blended learning is not universal because it is fundamentally interdependent with the context in which it occurs. They note characteristics such as the mission of the institution, faculty responsiveness, and institution supports, among others are critical to framing the concept.

The factors of effectiveness on blended learning to the students will identify in this research. Factors of effectiveness on blended learning plays an important roles to give a fact whether blended learning is really have an impact or not onto the students. It also shows that what kind of factors have the most impact onto the students to make blended learning be more effective in studies compared to traditional learning. The aim is to consider the highly contextual environment of effective blended learning courses and strategies teachers use to unify the face-to-face and online components of their courses to support student success.

This research also will investigate the experiences of students in using blended learning. This is because, previous students especially from UiTM are generally familiar with the blended learning (i-Learn) compared to students from other universities. Some universities did not expose their students to use the blended learning process.

DEFINITION

In this modernization era, technology has become a part of everyone’s life. With the advancement of technology nowadays, it made it possible to discover many functional and people can just put any information that they want from their fingertips. Technology also constantly improving its application and most importantly has made our lives easier, faster and better. It is incredible just to think what technology can give enormous benefits towards world. The advancement on technology also did not limited to communication, electronic devices but also in other aspects as well. In terms of education, most universities nowadays use blended learning or e-learning to teach their students. According to Lalima and Kira Lata Dangwal,

(2017), blended learning is the concept that includes framing teaching learning process that incorporates both face to face teaching and teaching supported by ICT. With blended learning, students are no longer needed to attending the traditional classes. They can independently completing online classes outside of the classroom. Students can also be more flexibility and responsibility by combining classroom learning with online learning.

In Universiti Teknologi MARA (UiTM), the lecturers use i-Learn not only to teach their students via online platform but also to give any information or updates regarding the university. There is also a platform called SuFO which is an online system for students to evaluate their lecturers overall teaching and learning. Academics now can put course materials online for students to access and also create online activities and discussion to improve students understanding and encourage deeper learning. This means, with i-Learn, lecturers can just put and give the students assessments or a topic to discuss. By this, students will leave their answer and get their assessment through i-Learn without having to wait for their lecturers.

As blended learning has become a common thing nowadays, there are a lot of universities out there that provided blended learning for their students. Showed that the blended learning was an effective approach in making a profound learning of academic subjects. With the effectiveness of using blended learning, students nowadays prefer to have their online classes compared to traditional learning. This proved that blended learning not only helpful in terms of socialization part but also for education system as well.

IMPORTANCE OF BLENDED LEARNING

Today, information and communication technologies have a huge impact on teaching and learning sector due to the advancement of technology. According to Cobanoglu and Yurdakul, (2014), blended learning (b-learning) is considered as the dominant instructional model in higher education. Blended learning approaches big chances to enhance the campus experience and extend learning through the innovative use of internet information and communication technology. Hence, when the two approaches are thoughtfully integrated, the educational possibilities should expand in many ways (Garrison, Hanuka and Hawes, 2004).

In term of flexibility, blended learning provides ultimate flexibility in presenting content. The students can learn about complex topic in the classroom, while they can discuss more about

the topic or assessment in more details through online. This was supported by studies on b-learning implementation in higher education suggest that blended learning makes students' transfer theoretical knowledge to real-life makes them responsible for their own learning by means of the flexibility of how, what, when to study and also helps students get prepared before lessons, review materials and further investigate the content and self-evaluate (Cobanoglu and Yurdakul, 2014). The important digital assets in b-learning is internet connection itself whereby in UiTM, students are provided with free Wi-Fi connection so it will not be a problem for them to connect with the Internet. Thus, students can easily access to i-Learn whenever they have free time and wherever they are. Students are no longer have to wait to address their concerns and questions, as the online training resources are always available to help.

Next, blended learning is important for students especially with problem based design provide students flexibility in their cognition and mention importance of the cognitive flexibility. As mentioned by Canas, (2009), he stated that the students will be able to improve the abilities of adapting their cognitive processing strategies to the new unexpected circumstances. It will be a great platform for the students to be more reliable and did not depend too much on others in order to build self-regulation skills. As we are leading in 21st century and Industrial Revolution 4.0 phase, this skill is needed as it can be a part of effective learning.

FACTORS OF USING BLENDED LEARNING (i-LEARN)

TIME MANAGEMENT

There are a lot of factors of using blended learning. Some of them are for time management, study achievement and also for social interaction. It is no longer a secret that most of students out there prefer to use blended learning compared to traditional learning. One of the reasons is because of the time management. Blended learning also offers flexible time frames that can be personalized to each person, offering them the ability to learn at their own pace. This means, with the existence of blended learning, students can just make their selves available without having to come into class. In other words, students can access into any material that they want from anywhere at any time. With blended learning, it is somehow can help the students to get their things done more competently and also efficiently. They do not have to rush and

stressed out thinking about coming late to class. All they have to do is make them available with the time that their lecturers have given them.

The second reason on how blended learning can help with the time management is when the lecturers give their assignments or any task that need to be done through online. For example, the lecturer will set the time for their students to answer the topic given and all they have to do is to pursue the time given. Through this way, students are not only appreciate the time given but can even found the information quickly. They will not trying to delay the time but will try their best to get things done. Furthermore, blended learning somehow teaches the students to appreciate time and also be more punctual. They have to be well-timed because sometimes there is time given in completing a task and this makes the student to be more serious in completing the assignment given.

Via blended learning, students also will be more independent and have the satisfaction in moving alone. They feel that they have to take more responsibility while learning independently and enjoy working their own way. This is due to how blended learning can be access at any time and in anywhere. They have the freedom to do their assessment at any places and this somehow helps them to be more active and engaged to be in class. Through this online environment, students will also be more challenged and strive to do their best to do their classes online and completing the assignments given.

STUDY ACHIEVEMENT

In order to find out the effect of blended learning on achievement, perceived cognitive flexibility levels and self-regulated learning skills, one way Analysis Of Variance (ANOVA) for repeated measures and paired samples t-test (A hypothesis test that is used to compare the means of two populations) with Bonferroni correction were performed. On the other hand, the qualitative findings attained through content analysis method were classified as implementation, feedback for implementation and proofs for effectiveness of blended learning based program implementation themes. The results revealed that blended learning based program had a positive effect on the students' achievement, perceived cognitive flexibility levels and self-regulated learning skills.

According to the stakeholders' views, blended learning based program implementation led students to think, inquire and explore the subject matter, share their opinions, discuss and appraise others' opinions. Also, it was revealed that students gained different perspectives and were able to think deeply and critically. Hence, the stakeholders implied that the students were able to transfer those skills to real-life. This study suggested that blended learning based curriculum development studies which were guided by learning goals, characteristics of learner group, teaching and learning theories, qualified instructor and expert team, technological infrastructure, essential budget and management support to be planned, designed, implemented, evaluated and disseminated in higher education.

According to Graham, (2016), he said that studies on blended learning implementation in higher education suggest that blended learning makes students' transfer theoretical knowledge to real-life makes them responsible for their own learning by means of the flexibility of how, what, when to study. While Eryilmaz, (2015), mentioned that blended learning also helps students get prepared before lessons, review materials and further investigate the content and self-evaluate. Various results about blended learning effects on academic success and attitude towards lessons are remarkable. According to El-Deghaidy & Nouby, (2008) and Yılmaz, (2009), they indicated that blended learning increases academic success and positively effects lesson attitudes while some showed no significant effect on academic success and attitudes.

SOCIAL INTERACTION

The advancement of technology make possible for blended learning which combines face-to-face and online pedagogy is the most promising approach for increasing access to higher education and learning outcome among students. Chen and Looi, (2007), also stated that online discussion offers more chances for the practice of in depth clarification and inference skills. By engaging learners in deeper language processing, blended learning has great potential to increase the quality and quantity of learner output (Abdul Rauf Ridzuan et al., 2017)

According to Abrams, (2003), blended learning also provides learners with more time to think and edit. Students are able to create more thoughtful responses because they have more time to process input and to reflect on what they want to express through online discussions. Thus, students learn to express themselves, are exposed to alternative points of view, and are better positioned to respect other's opinions, since none of the participants can easily dominate

the discussion. Moreover, according to Ng and Cheung, (2007), Romiszowski and Mason, 2004, stated that online discussion forums can assist students' interpretation of knowledge through collaboration in groups by providing the necessary environment for the social negotiation of meaning. An array of behaviors that lead to success collaborative learning in an asynchronous networked environment, including on task activities, mutual explanations, social chat and other similar behaviors, have been classified in Curtis and Lawson's (2001) study.

The quality of interaction is of equal importance in both face-to-face and online environment. Ginns and Ellis, (2009) emphasize that blended learning experience provides a combination of both face to face and online experiences, which support each other in achieving desired learning outcomes. Some researchers explore how the interactions in class can influence interaction through online. As an alternative to face-to-face learning, blended learning is not only can increase the strengths of each environment while at the same time reducing their weaknesses (An and Frick, 2006).

RESEARCH FRAMEWORK

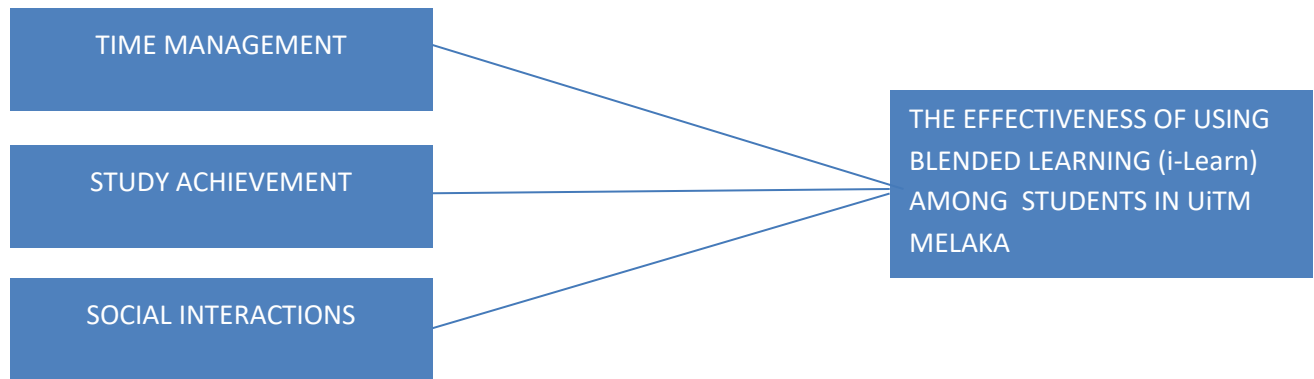


Figure 1.1: The Effectiveness of Using Blended Learning (i-Learn) Among Students in UiTM Melaka

RESEARCH METHODOLOGY

Research Design

The research is the quantitative survey type of research. The link to the online survey was distributed through social media such as WhatsApp, Facebook, Instagram and Email. By using the social media platforms, it easy to reach the public as the study is focus on public respond.

Sampling Technique

The study is using convenient sampling technique which is nonprobability sampling. According to Lavrakas (2008), in non-probability sampling, the population may not be well denned, and the non-probability sampling is often divided into three categories which is purposive, convenience and quota sampling. The study uses convenience sampling technique where the target respondents are among the public in various occupation, which is workers in Government and Private sector, self-employed, housewife, retired, students and also unemployed. The total number of respondents for the survey is 200.

Research Measurement

The questionnaire is consisting 60 questions included with the demographic section. The questionnaire is related to the research objectives of the research. The questions are using ordinal, nominal and scale to measure the data. The data are key-in in the Statistical Package of Social Science (SPSS). The questions are reliable and valid which make the respondents are easy to understand and answer the questions.

Data Analysis

The method used for data analysis are through Statistical Package of Social Science (SPSS) software version 23. The data analysis procedure is included creating survey stage, Pilot test and data transferring. The survey or questionnaire are created with the questions that are related to the research objectives of the research. The questionnaire is distributing to the first 50 respondents in order to identify the reliability of the research. The survey is continued to

complete the data of 440 responses and the data collected transferred to SPSS software for analysis and finding purposes (Ridzuan, Ridzuan and Ridzuan, 2015)

FINDINGS: RESULTS AND DISCUSSIONS

a) The demographic of the sample is discussed in terms of sex, age, current education level, origin, UiTM branch, faculty, current CGPA and 4 of general questions regarding the blended learning (i-Learn).

Table 1: Distribution of the respondents by demographic (n=210)

DEMOGRAPHIC	FREQUENCY	PERCENTAGE (%)
Sex:		
• Female	154	73.3
• Male	56	26.7
Age:		
• 18 – 20	70	33.3
• 21 – 22	109	51.9
• 23 – 25	29	13.8
• 26 & above	2	1
Current Education Level:		
• Pra-Perdagangan	-	-
• Diploma	68	32.4
• Degree	140	66.7
• Master/PHD	2	2
Origin:		
• Bumiputera Semenanjung	196	98.1
• Bumiputera Sabah/Sarawak	4	1.9
Uitm Branch:		

<ul style="list-style-type: none"> • Kampus Alor Gajah • Kampus Bandar Melaka • Kampus Jasin 	148 38 24	70.5 18.1 11.4
<p style="text-align: center;">Faculty:</p> <ul style="list-style-type: none"> • Komunikasi Dan Pengajian Media • Pengurusan Hotel Dan Pelancongan • Pengurusan dan Perniagaan • Perakaunan • Seni Lukis Dan Seni Reka • Sains Komputer Dan Matematik • Perdagangan Dan Agroteknologi 	60 13 57 49 6 14 11	48.6 6.2 27.1 23.3 2.9 6.7 5.2
<p style="text-align: center;">Current CGPA:</p> <ul style="list-style-type: none"> • < 2.00 • 2.01 – 2.50 • 2.51 – 3.00 • 3.01 – 3.49 • 3.50 and above • New Student 	- 7 22 85 48 48	- 3.3 10.5 40.5 22.9 22.9

Table 1 above shows the demographic of respondents from the students of UiTM Melaka. Based from the findings, most of the respondents who answered the questionnaires are among female (73.3%) and male (26.7%) aged between 21–22 (51.9%), Degree (66.7%), Bumiputera Semenanjung (98.1%). Most of the respondents are from students of Komunikasi Dan Pengajian Media (48.6%) from Kampus Alor Gajah (70.5%) with 3.01 – 3.49 (40.5%).

b) Respondent’s opinion towards blended learning (i-Learn)

There are four questions that were asked in this section. The reason of asking these questions to the respondents is to know about their opinion towards blended learning (i-Learn).

Table 2: Respondent’s opinion toward blended learning

Questions	Frequency	Percentage (%)
Are you familiar with blended learning (i-Learn)?		
• Yes	196	97.1
• No	4	2.9
Blended learning (i-Learn) helps me a lot in my studies.		
• Yes	174	82.9
• No	36	17.1
How often do you use blended learning (i-Learn)?		
• Always	34	16.2
• Sometimes	129	61.4
• Rarely	47	22.4
• Never	-	-
How well do you use blended learning (i-Learn)?		
• Expert	29	13.8
• Average	163	77.6
• Amateur	18	8.6

Table 2 above shows the respondent’s opinion towards blended learning. Based on the findings, most of the respondents who answered the questionnaires stated that they are familiar with blended learning (i-Learn) which is (97.1%).They also agree (82.9%) that blended learning (i-Learn) help them a lot in their studies. Most of the students also often used blended learning (i-Learn) (61.4%) and they are on average (77.6%) when using the blended learning (i-Learn).

a) FACTORS OF USING BLENDED LEARNING (i-LEARN)

Time Management	Mean
I feel that blended learning and its curricular able me to learn in a short time.	3.03
I believe that blended learning can save my time.	3.12
For me blended learning is very convenient since I can focus more on syllabus rather than coming to class.	2.93
I believe that time management is important key to success in studies.	3.30
I think that blended learning makes me to complete my assignment faster.	3.03
Overall	3.08

Table 3: Time Management

From the Table 3, respondent from UiTM believes that time management is an important key to success in studies (M=3.30). Overall, the average mean for time management is (M= 3.08).

Study Achievement	Mean
I am able to be more independent in looking for information through blended learning	3.11
I found the material on i-Learn are organized which cover all my needs for the aim of studying the course	2.98
Quizzes and additional notes which conducted through blended learning is very useful to me	3.13
I am able to understand more through blended learning compared to face to face learning	2.76
For me brainstorming and finding relevant information through online can help me to resolve content related questions	3.04
Overall	3.00

Table 4: Study Achievement

The data analysis in Table 4 shows that quizzes and additional notes which conducted through blended learning are very useful (M=3.13). However, students are not able to understand much through blended learning compared to face-to-face learning (M=2.76). Overall, the average mean for study achievement is (M= 3.00).

Social Interaction	Mean
I think that online discussion help me to develop a sense of collaboration	2.90
I can improve myself to work in a team through blended learning	2.89
Blended learning is a good medium for me to share about my opinion without feeling shy	3.05
I am able to discuss with my classmate effectively through blended learning	2.89
I prefer to use blended learning in order to have one to one communication with my lecturers	2.81
Overall	2.90

Table 5: Social Interaction

Based from the table 5, the data shows that blended learning is a good medium for among students in UiTM Melaka to share about their opinion without feeling shy ($M=3.05$). Yet, the students are more prefer to use blended learning in order to have one to one communication with their lecturers ($M=2.81$). Overall, the average mean for social interaction is ($M= 2.90$).

Effectiveness of Using Blended Learning (i-Learn)	Mean
I believe that blended learning is very effective to be implemented in our education sector widely.	3.06
As for me, blended learning can lead to a better understanding in learning process.	2.91
Blended learning can make me perform well in my studies.	2.93
Blended learning approach me to contribute and learn at my own pace.	3.05
Blended learning can expose me in academic as well as technology advancement.	3.11
Overall	3.01

Table 6: The Effectiveness Of Using Blended Learning (i-Learn)

CONCLUSION

Based on the findings, we can conclude that the blended learning is acceptable by the students in UiTM Melaka even though it is not the first choice of education in UiTM Melaka. The three blended learning factor can be arranged as:

Time Management	3.08
Study Achievement	3.00
Social Interaction	2.90

The factors obtained the highest mean as the students believe that blended learning is very effective to be implemented in education sector. This means that time management factor is the main factor for the effectiveness of using blended learning (i-Learn) because it can save time.

At the same time, it can also improve the study achievement for those students who particularly are having problems in managing their time. This blended learning method also can be used as an alternative method in the future due to the technologies advancement. Through blended learning, we can see that it will give a huge impacts towards time management (M= 3.08).

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