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BLENDED LEARNING IN SUBSTANTIVE AND PROCEDURAL LAW MODULES: MALAYSIA'S EXPERIENCE

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ABSTRACT

Since its inception in 1990s, blended learning gain its footing in higher education system. The awareness amongst law lecturers on the blended learning however are not encouraging as they are firmly hold to Socratic methodology and conventional classroom face-to-face instruction. This study examines the awareness of law lecturers in using blended learning and the performance of the students who enrolled in blended learning classes. This study involves descriptive and inferential statistical analyses to investigate the law lecturers' awareness and to analyse impact of blended learning toward students' performance. Five modules have been experimented, three substantive law modules and two procedural law modules. The results suggest that the awareness of law lecturers on the usage of blended learning is increasing. While students' performance, the result shows that it is better if the module is blended, but only in regards to substantive law module. On the contrary, the performance of the students is unsatisfactory in the procedural law module. This study concludes that while the awareness and the interest among law lecturers to use blended learning is increasing, it is also concluded that the suitability of blended learning only in regards to substantive law modules compared to procedural law modules.

INTRODUCTION

Global transformation of higher education happened in the early 1990s due to proliferation of Internet technology where new era of learning possibilities and creative educational delivery methods emerged (Alkhatib, 2018). This is the time where the blended learning in teaching delivery method is introduced and has developed over the past decades (Chan, 2017). The blended learning is introduced to enhance lectures delivery and improve the quality of discussion in the face-to-face lectures. Blended learning or also known as hybrid learning is an integrated teaching mode that combines face-to-face and online instruction (Graham, 2006). The learning outcomes are assessed using online quizzes for each lecture topic during the semester, and on the end-of-semester exam (McKenzie et al., 2013).

This paper aims of to investigate the awareness of the law lecturers on blended learning and analyse whether blended learning method has an impact on LLB students' performance. In this study, the School of Law, Universiti Utara Malaysia is chosen as a case study. This paper is organised to few sections; first, it presents several past studies pertaining to blended learning, followed by section that elaborates the context and limitation of study accordingly. Then, next section depicts the methodology employed in this study, including the method used to investigate awareness of blended learning and impact of blended learning on students' performance. Lastly, the final section presents the results, discussion and conclusion of this article.

LITERATURE REVIEW

Technological advancement and the Digital Age has impacted positively in the democratization of technology in higher education. It is argued that the introduction of blended learning by utilising technology in teaching modules is considered as the most successful method in integrating technology into pedagogy. Blended learning is considered as quantum leap in pedagogical strategies, from conventional face-to-face delivery to a blending of traditional and technological advancement deliveries (Georgina & Olson, 2008). It is also highlighted that the faculty development is about creating awareness amongst teacher to align their teaching methods with the needs of students (Kukulaska-Hulme, 2012). It is as such that numerous studies are conducted that demonstrate positive impact of blended learning and online testing across the fields (Angus & Watson, 2009; Gikandi, Morrow, & Davis, 2011; Stull, Varnum, Ducette & Schiller, 2011) like chemistry (Kirna, 2014), mathematics (Mutaqin, Marethi, & Syamsuri, 2016) and even in teaching oriental music (Edward, Asirvatham, & Md Johar, 2019). However, there is scarcity of study on the awareness and the impact of blended learning on legal education in the higher education institution.

As such, one of the main outcomes of this study is about the use of information technology in teaching delivery and its impact on students' performance in legal education. Undoubtedly, higher education has to adapt

with the widespread use of social media, online social networking and mobile devices (Kukulska-Hulme, 2012). Globalization and proliferation of technological advancement shape the different nature of a higher education classroom nowadays (Becker, et al., 2017). Teachers need to face change, and how to teach is pertinent. Teachers need to learn appropriate pedagogies delivery (Sentence & Csizmadia, 2017). Also, academic research requires the teachers/lectures to keep up with technological advancements and social media dissemination channels, even if technology is not the research focus (Kukulska-Hulme, 2012). However, it is argued that the use technology makes no sense unless it introduces difference and innovation in both teaching and learning. Teaching with technology-based delivery requires a high level of expertise and considerable resources and individual effort on the part of the lecturers. The lecturers or instructors must be prepared to keep up with the rapid advancement of technology once they choose to accept the demands of technology-based teaching and master its use. Again, some argues that without technology, effective and brilliant teaching can occur within the classroom (Bates & Poole, 2003; Bates, Bates & Sangra, 2011).

Blended learning in legal education

Blended learning has been defined by Slomanson (2014) as a new format of teaching which offers both face-to-face and virtual elements, whereas the traditional teaching involves classroom environment only. In the late 1990s, “blended learning” (Friesen, 2012) or “flipped classroom” have been in existence and the phrase “blended learning” itself is defined as “a method of learning which uses a combination of different resources, especially a mixture of classroom sessions and online learning materials” (Yeung & O’Malley, 2014). Thus, it is indeed becoming a major alternative to traditional and standard teaching.

However, blended learning is not welcomed or received openly by law lecturers. The lack of awareness and interest in blended learning is highlighted by Binford (2014) who revealed that only one law professor had utilised blended learning through Khan Academy. This is after seven years of the establishment of Khan Academy which is the first major non-profit unaffiliated with a university making hundreds of digital tutorials available to the public online for free. Another highlight revealed by Binford (2013) is on the dearth of the U.S. law professors involving in MOOC that have been hosted by three major players in the MOOC universe—Coursera, Udacity, and edX, only four MOOCs were taught by U.S. law professors.

The concept of Flipped Classrooms (and the connected concept of ‘blended learning’) has no unified definition in legal education (Wolff & Chan, 2016). Traditionally, legal research instruction involved lectures in classroom while research assignment should be completed outside of class time. This is a typical Socratic Method where the professors give lectures and instructions to students in a face-to-face classroom. Student are given instructions about the time of their presentation in class, submission of the assignment, quizzes, tests as well as final exam. Even though the online and the traditional classroom

model sound different in terms of delivery, both models share the same expectation that the students has to prepare before coming to class for discussion. The difference between blended learning classroom and the traditional classroom model is only with regard to student engagement with material in the class. (Lemmer, 2013).

Regardless of the fact that technology has great influence towards higher education teaching and learning process, the effectiveness of technology utilisation in this area is still debatable. Kirkwood and Price (2014) argued that technology has not achieved substantial uptake in transforming teaching and learning practises in higher education.

The above statement has been supported by a study by Ramlogan, Raman and Sweet (2014) and Wilson and Sipe (2014) where it was found that traditional or live lectures are more effective compared to online instruction alone. This finding is further supported by Mason et al. (2013), and Johnson and Renner (2012) where it is claimed that there is no significant difference with regard to student's achievement between traditional or blended learning environment. However, Osman, Jamaludin and Mokhtar (2014) found that flipped classroom has the advantage over traditional classroom in terms of positive perception and achievement from the students.

Other findings also resulted in 'no significant difference' with regard to the effectiveness of various technologies used in teaching delivery (Arbaugh et al., 2009; Means et al., 2010; Oh & Reeves, 2010; Reeves, 2011; Lemmer, 2013). Only modest improvement has been shown (Kirkwood & Price, 2013) with only few that met their 'rigour' criteria on the effectiveness of teaching and learning (Means et al., 2010).

On the other hand, research also shows that students involved in blended learning modules perform better than students who are only engaged in traditional face-to-face classes. Student's achievement of learning outcome in blended learning modules is 35% better than the conventional face-to-face classroom (Slomanson, 2014).blended learning, legal education, awareness of law lecturer, substantive law, procedural law blended learning, legal education, awareness of law lecturer, substantive law, procedural law Chan (2017) has conducted a case study on one of the LLB module namely Employment Law, where the module received 100% positive feedback in relation to the methods of teaching, where 53% of the students find that using online learning (e.g. Adobe Connect) helps to increase their level of confidence. Another case study is on LLB module of Company and Partnership Law, it recorded a score of 4.4 for being an interesting module. It shows that most of the students agree that the course is stimulating and they have achieved excellent result as opposed to traditional face-to-face classes' counterpart.

In sum, two main arguments highlighted above, firstly that the fusion of technology into the higher education teaching and learning does not give any significant impact upon the performance of student's learning outcome. Secondly, the hybrid of technology into conventional face-to-face classroom

model or better known as blended learning has resulted in great improvement in terms of students' performance, confidence level and achievement of learning outcome. These two arguments are discussed within the context of the study.

CONTEXT OF THE STUDY

The Socratic Method in teaching and learning has deeply rooted in legal education. Even with the advancement of technology, it is shown at the above that the law lecturers and professors are very reluctant to move from their comfort zone. Blended learning is the major shift from Socratic Method or conventional face to face method. The question is whether law lecturers aware of the current trend of blended learning in teaching delivery as opposed to the traditional face-to-face classroom. Another question is whether the utilisation of blended learning method correlates with student's performance. Thus, this study aims to examine the awareness of law lecturers towards blended learning method and evaluate the impact of blended learning on student's performance.

LIMITATION OF STUDY

This study has some limitations, which may require attention in future research. Firstly, the participant in this study consists of all lecturers and final year students, which focus on five modules only whereby the total number of modules for final year students is eight modules. For the future study, all of LLB students and all courses might be involved as participant. The result then will be a true indicator in terms of lecturer awareness towards blended learning and the impact of blended learning on student's performance.

METHODOLOGY

This study involves descriptive statistics in order to examine the awareness among law lecturers in Universiti Utara Malaysia, Kedah. Data analysis is done through the frequency distribution process to show frequency and percentage value. Besides, in order to determine whether blended modules have impact on students' performance, an inferential statistics namely two-sample Z-test has been applied.

Participants

At Universiti Utara Malaysia, a new approach in learning process is achieved by introducing an online learning system namely UUM Online Learning. UUM Online Learning is an online learning application used by lecturers and students for teaching and learning activities. This application is used as a diagnostic and formative assessment tool to provide feedback on students' understanding of lectures for each module. All lecturers and final year students at the School of Law, Universiti Utara Malaysia for four consecutive semesters, i.e. semester A152 represent for semester February

2016, A161 (September 2016), A162 (February 2017) and A171 (September 2017), participate in this study. Semester A152 and A161 trigger the implementation of blended learning method where the traditional or face-to-face lectures still consider as priority. However, at the beginning of semester A162 and A171 respectively, transformation of new approach in learning process by using UUM Online Learning was implemented to enhance the teaching and learning process. Thus, final year students selected as participants because they have been involved in both traditional learning and blended learning process. Summary of data involves is tabulated as Table 1:

Table 1 Participants data

Semester	Number of Law Lecturers	Number of Final Year Students
Sem A152	69	80
Sem A161	76	92
Sem A162	75	92
Sem A171	80	97

Evaluation

Awareness of blended learning

The awareness of blended learning among lecturers is assessed through four aspects which are information, resources, activities and assessment. The ability to carry out teaching and learning activities through online learning is termed as blended if lecturers are able to comply with the minimum numbers of material uploaded in their online learning portal. This involves at least one (1) general information, seven (7) resources, three (3) activities and two (2) assessments. These data were analysed based on percentage calculation of blended modules with the total modules offered for that semester. The percentages value represents the increment or decrement of awareness towards blended learning for every semester. This awareness is evaluated for four semesters i.e. semester February 2016 (A152), September 2016 (A161), February 2017 (A162) and September (A171). The result is shown in Figure 1.

Student's performance

The students' performance has been analysed in terms of examination scores for five modules out of eight modules offered in LLB program which are Law of Banking and Industrial Security (GLUP4084), Jurisprudence (GLUP4074), Professional Practice I (GLUP4054), Advocacy Skills and Opinion Writing (GLUP4094) and Professional Practice II (GLUP4064) for semester A152, A161, A162 and A171. Three substantive law modules (Law of Banking and Industrial Security, Jurisprudence and Advocacy Skills and Opinion Writing) are taught by university lecturers while the other two procedural law modules (Professional Practice I & II) are taught by legal

practitioners. These five modules are chosen because they are substantive and procedural law modules offered in those particular semesters.

Impact of blended learning and students' performance

During semester A161 and A171, there were three modules offered by School of Law, namely, Law of Banking and Industrial Security (GLUP4084), Jurisprudence (GLUP4074), and Professional Practice I (GLUP4054). For semester A152 and A162, two modules have been offered namely Advocacy Skills and Opinion Writing (GLUP4094) and Professional Practice II (GLUP4064).

The impact of blended learning toward students' performance was analysed by using an inferential statistical through hypothesis testing. This inferential statistical analysis aims to draw conclusions from a sample and generalize them to a population. In this study, this statistical analysis identified as an appropriate test to testing the difference between two population means. Thus, the comparison means in terms of average score of examination results by using hypothesis testing procedure was conducted to investigate the impact of blended learning towards students' performance.

There are five steps involve in this hypothesis testing. The first step required to state the null hypothesis (H_0) and alternative hypothesis (H_A). Second step involve the formulated a plan by select an appropriate test and level of significance. In this study, a hypothesis testing namely two-sample Z-test is used to compare two sample means (semester A171 and A161) and (semester A162 and A152). For significance level, this study applied 0.05 significance level because most researchers choose 0.05 value to conduct their research project. The next step required to state the decision rules by determined the critical value in order to decide either H_0 will be accepted or rejected. At fourth step, this hypothesis test computed and decision is made by comparing the computed test statistic with critical value. For the last step, the decision will be interpret based on fourth step. In this study, the results obtained are presented in Table 2, Table 3, Table 4, Table 5 and Table 6.

RESULTS

Awareness of blended learning

This study aims to investigate the awareness of law lecturers on blended learning. The awareness of law lecturers toward blended learning is summarised in Figure 1.

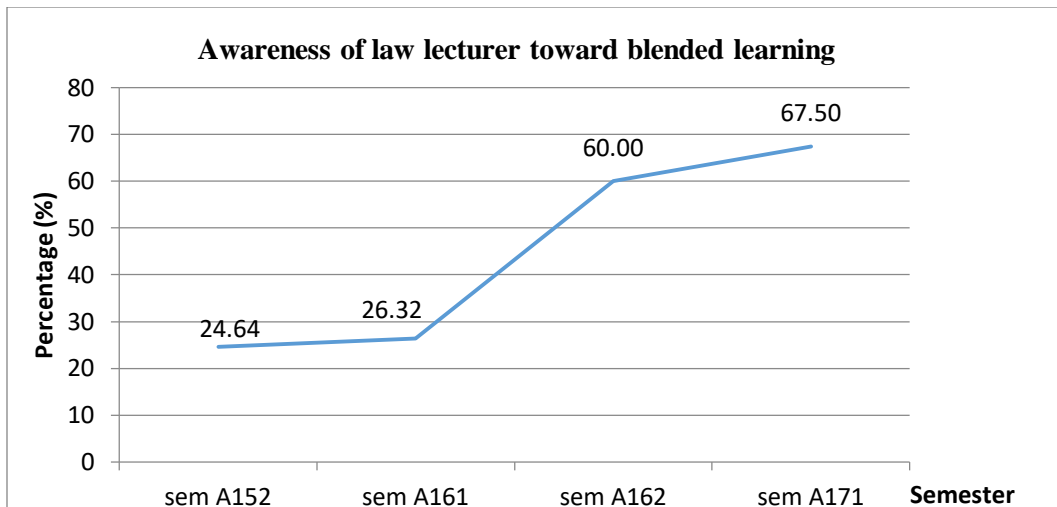


Figure 1 Awareness of law lecturers towards blended learning

Figure 1 shows the percentage values of blended learning for four semesters, i.e. semester A152, A161, A162 and A171. For semester A152, the percentage value is 24.64%, semester A161 (26.32%), semester A162 (60.00%), and semester A171 (67.50%). Based on this figure, it reveals that percentage of blended learning is increasing for every semester, while percentage of unblended learning is decreasing. Therefore, it can be concluded that lecturers' awareness towards blended learning is increasing over the semesters.

Impact of blended learning with students' performance

The sub-objective of this study is to investigate the impact of blended learning towards examination grade (student performance) for each module. It is expected that the student performance should be increase in line with the increasing implementation and awareness of blended learning among law lecturers.

In this study, an inferential statistic by using hypothesis testing namely two-sample Z-test is used to compare two sample group (semester A171 and A161) and (semester A162 and A152). This hypothesis testing has been applied to test the difference between two population means in terms of examination scores with blended learning (Semester A171 and A162) and without blended learning (semester A161 and A152). The mean value represent the average of examination score for every single module. Meanwhile, standard deviation (SD) is used to measure score distribution around mean value.

For semester A171 and A161, two-sample Z-test conducted for three modules such as GLUP4084, GLUP4074 and GLUP4054. These data are obtained to compare means of examination scores for blended learning with the examination scores without blended learning. We wish to know if we may conclude, at 95% confidence level ($\alpha = 0.05$), the mean of examination scores for blended learning method (modules offered in semester A171) higher than

means of examination scores for traditional face-to-face classroom method (modules offered in semester A161). Thus, the H_0 stated that $\mu_{A171} \leq \mu_{A161}$, while H_A stated that $\mu_{A171} > \mu_{A161}$. With $\alpha = 0.05$ and two tail test, the critical value of z is ± 1.96 . Then, a summary of data analysis for semester A171 and A161 is presented in the following Table 2, Table 3 and Table 4.

Table 2 Two-sample Z-test for module GLUP4084 (semester A171 and A161)

Sem A171			Sem A161			Difference Mean (\bar{x})	Z value	Significance level (α)
n	Mean (\bar{x})	SD (σ)	n	Mean (\bar{x})	SD (σ)			
95	75.24	7.24	94	69.35	10.25	5.89	4.56	0.05

Table 2 shows the results of two-sample Z-test for module GLUP4084 for blended learning (Semester A171) and without blended learning (Semester A161). Results from this analysis indicate that mean score and SD in Semester A171 is 75.24 and 7.24 while mean score and SD for Semester A161 is 69.35 and 10.25. The difference means score between those tests is 5.89. Results of the study are significant (reject H_0 , Z value (4.56) > 1.96). It shows that the students' performance is better with the implementation of blended learning method for module GLUP4084.

Table 3 Two-sample Z-test for module GLUP4074 (semester A171 and A161)

Sem A171			Sem A161			Difference Mean (\bar{x})	Z value	Significance level (α)
n	Mean (\bar{x})	SD (σ)	n	Mean (\bar{x})	SD (σ)			
88	80.11	5.16	93	62.14	6.44	17.97	20.77	0.05

Table 3 tabulated the result for module GLUP4074 for Semester A171 and A161. Results from the analysis shows that mean score and SD for Semester A171 are 80.11 and 5.16 while mean score and SD for Semester A161 are 62.14 and 6.44. It shows the increasing value in terms of examination scores for module GLUP4074 with the difference of means scores equal to 17.97. In terms of hypothesis testing, the results of the study were significant (reject H_0 , Z value (20.77) > 1.96).

Table 4 Two-sample Z-test for module GLUP4054 (semester A171 and A161)

A171			A161			Difference Mean (\bar{x})	Z value	Significance level (α)
n	Mean (\bar{x})	SD (σ)	n	Mean (\bar{x})	SD (σ)			
97	73.63	6.9	92	73.75	8.41	-0.12	-0.11	0.05

Table 4 shows the results for module GLUP4054 for Semester A171 and Semester A161. Results from this analysis indicate that mean score and SD in Semester A171 is 73.63 and 6.9 while mean score and SD for Semester A161 is 73.75 and 8.41 accordingly. The difference means score between those tests is -0.12. Results of the study were not significant (fail to reject H_0 , Z value $(-0.11) \leq -1.96$). It shows that the students' performance is decreasing when the blended learning method is applied for module GLUP4054.

The above Table 2, Table 3 and Table 4 reveals that the implementation of blended learning increases the students' performance only for two modules, i.e. GLUP4084 and GLUP4074, while for module GLUP4054, the results of the study were not significant. Thus, we can conclude that the blended learning directly affecting on students' performance for two substantive law modules, i.e. GLUP4084 and GLUP4074. For procedural law module i.e. GLUP4054, the blended learning does not have a significant impact on student performance.

For Semester A162 and A152, two-sample Z-test conducted for two modules which are GLUP4094 and GLUP4064. These data are obtained to compare means of examination scores for blended learning (Semester A162) with examination scores without blended learning (Semester A152). We wish to know if we may conclude, at 95% confidence level ($\alpha = 0.05$), the mean of examination scores for Semester A162 higher than means of examination scores for Semester A152. Thus, the H_0 stated that $\mu_{A162} \geq \mu_{A152}$, while H_A stated that $\mu_{A162} < \mu_{A152}$. With $\alpha = 0.05$ and two tail test, the critical value of z is ± 1.96 . Then, a summary of data analysis for semester A162 and A152 is presented in the following Table 5 and Table 6.

Table 5 Two-sample Z-test for module GLUP4094 (semester A162 and A152)

A162			A152			Difference Mean (\bar{x})	Z value	Significance level (α)
n	Mean (\bar{x})	SD (σ)	n	Mean (\bar{x})	SD (σ)			
92	83.15	2.71	80	82.48	3.33	0.67	1.43	0.05

Table 5 shows the results of two-sample Z-test for module GLUP4094 for blended learning (Semester A162) and before the implementation of blended learning (Semester A152). Results from this analysis indicate that mean score and SD in Semester A162 is 83.15 and 2.71 while mean score and SD for Semester A152 is 82.48 and 3.33. The difference means score between those tests is 0.67. Results of the study were not significant (fail to reject H_0 , Z value $(1.43) < 1.96$). It shows that there is an increase in students' performance when blended learning method for module GLUP4094 is implemented.

Table 6 Two-sample Z-test for module GLUP4064 (semester A162 and A152)

A162			A152			Difference Mean (\bar{x})	Z value	Significance level (α)
n	Mean (\bar{x})	SD (σ)	n	Mean (\bar{x})	SD (σ)			
109	80.87	3.79	79	89.52	5.22	-8.65	-12.53	0.05

Table 6 present the results for module GLUP4064 for Semester A162 and Semester A152. Results from this analysis indicate that mean score and SD in Semester A162 is 80.87 and 3.79 while mean score and SD for Semester A152 is 89.52 and 5.22. The difference means score between those tests is -8.65. Results of the study were significant (reject H_0 , Z value (-12.53) < -1.96). It shows that there is a decrease in students' performance when blended learning method for module GLUP4064 is utilized.

As reported in Table 5 and Table 6, mean for examination scores for module GLUP4094 increases due to the implementation of blended learning, while the students' performance decreases when blended learning method for module GLUP4064 is employed. Therefore, it is concluded that blended learning directly affecting the students' performance only for substantive law module i.e. module GLUP4094. However, for procedural law module i.e. GLUP4064, blended learning does not have a significant impact on students' performance.

DISCUSSION AND CONCLUSION

This study proved that lecturer's awareness towards blended learning is increasing for every semester. It is in line with the development of learning and teaching process in the era of IR.4.0. Lecturers' awareness on technological innovation and ICT is important to ensure teaching and learning process in higher education corresponds with the development of science and technology.

Also, in order to evaluate the impact of blended learning toward student performance, this study applies an inferential statistical analysis. The result indicates that there is a significant impact between blended learning and students' performance for three substantive law modules, i.e. Law and Banking and Industrial Security (GLUP4084), Jurisprudence (GLUP4074) and Advocacy Skills and Opinion Writing (GLUP4094). On the contrary, for two procedural law modules; Professional Practice I (GLUP4054) and Professional Practice II (GLUP4064), it shows that the blended learning does not have a significant impact on students' performance. As such, while acknowledging the finding of the previous studies on the effectiveness of blended learning as teaching methods, this is not always be the case when it involves procedural law modules. This study finds that online learning or blended learning is suitable for teaching substantive law modules, but not for procedural law modules where students need hands-on, face to face, participation and involvement from the practitioner. We rest our case.

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