



Assessing Lecturer's Readiness for Online Learning Implementation during COVID -19 Outbreak

***Dr Izwan Nizal Bin Mohd Shaharane**, *Senior Lecturer, School of Quantitative Sciences, College of Arts and Sciences, Universiti Utara Malaysia, nizal@uum.edu.my*

Muhamad Shahbani ABU BAKAR, *Universiti TeachiUniversiti Utara Malaysiang and Learning Center, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah, Malaysia. shahbani@uum.edu.my*

Hasniza NORDIN, *Universiti TeachiUniversiti Utara Malaysiang and Learning Center, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah, Malaysia. nizadin@uum.edu.my*

Nik Mohd Baidzani Haddan IBRAHIM, *Universiti TeachiUniversiti Utara Malaysiang and Learning Center, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah, Malaysia, baidzani@uum.edu.my*

Jastini Mohd JAMIL, *Department of Decision Science, School of Quantitative Sciences, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah, Malaysia, jastini@uum.edu.my*

Jin Sheng ANG, *Department of Decision Science, School of Quantitative Sciences, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah, Malaysia, angjinsheng@gmail.com*

***Corresponding Author**

Abstract. The COVID-19 outbreak is prompting many public and private universities to abruptly and comprehensively adopt online learning in place of face-to-face classes, to limit transmission of the virus. Academicians, students, and support staff are all working to accommodate this massive change. A survey research on the student, lecturer, and institutional readiness for online learning can help institutions better understand pre-COVID-19 perspectives. This study focuses on a case of Universiti Utara Malaysia (UUM) online education. This paper summary is one of a series of reports outlining higher education's readiness to move teaching and learning online to preserve and continue its educational mission during the current pandemic. Thus, questionnaire is distributed to all lecturers in UUM. The collected data is measured by Likert Scale of 1 to 5 and analyzed using IBM SPSS® software. The overall result has shown that lecturers in UUM are ready for online teaching during the lockdown period. However, there are several issues need to be rectified by the management of the university in preparing lecturer to convert their teaching and learning to online learning. As such, more training is required by the lecturer especially related to technological and online learning tools. Additionally, a reliable online learning platform is a must for the lecturer to endeavor this new experience.

Keywords: COVID-19, Online Teaching, Readiness, Higher Education, Survey

Received: 06.04.2020

Accepted: 27.05.2020

Published: 09.06.2020

INTRODUCTION

The Malaysia government encourages higher education institutions to optimize technology and apply it into teaching and learning so that higher education can align with the Malaysia Education Blueprint 2015-2025 [1]. However, the sudden outbreak of COVID-19 pandemic triggered a shock to many educational institutions. To prevent the pandemic spread among crowd, social distance at least 1 meter should be practiced [2]. Thus, traditional lecture class in university should be avoid by practicing social distance to decrease the risk of getting COVID-19. Malaysia has announced lockdown and closed most of school, universities and businesses at 18th March 2020 [3]. While many educational institutions have their own online learning management system (LMS), this outbreak has put a test to this online learning system to perform at their best.

The main objective of this study is to examine the readiness among UUM lecturers for online teaching implementation. The significance of this study is to provide an understanding of the situation of teaching and learning in online platform so that university can provide proper training to their staff and lecturers. The paper is organized as follow; in the next section, a problem statement and reviewing related works. Material and method in this research works are provided, follow by result and discussion. The conclusion is then explained and summarized in the last section.

Problem Statements and Related Works

During H1N1 pandemic outbreak, a study towards attitudes and intended behaviors staff and student found that university should invest more effort and money in online teaching and learning during inter-pandemic periods [4]. Many schools and universities have tried to move their education system from traditional to online platforms for many reason [5]. There are many benefits of utilizing online teaching and learning such as cost saving and provides flexibilities to students such as utilizing Google platform, Moodle and Web 2.0 facilities [6]. However there were some limitation and challenges faced in online education [7]. Easton [8] points out that lecturers need to be equip with the ability to interact with students through virtual communication and virtual management skills to teach in a cyberspace. Furthermore, the barriers and concern of implementing online teaching and learning include workload increased, the role of lecturers is different compare to traditional teaching, lack of technical and administrative support and course quality may be reduced [9].

Besides of the challenges faced by the lecturers, there are further challenges happen in Malaysia such as the limited availability of Internet and accessibility of gadget, smartphones, laptops and computers in the group B40 families [10]. Based on Department of Statistics in Malaysia, median household income less than RM3000 is consider group B40 [11]. In fact, one of the study indicates one third of Malaysia students do not have any devices or infrastructure to do online learning [12].

Despite there are many challenges need to overcome to implement online teaching and learning, UUM as one of the higher education institute need to implement online teaching and learning to ensure students can get their education even they need to stay at house and practice social distance due to this pandemic outbreak. However, readiness among all stakeholder is important to ensure the implementation of online teaching and learning is successful. E-readiness is defined as the psychological and physical preparation of an institution for e-teaching experience or process [13].

To examining readiness of university to teach online, four main areas are focused including course design, communication, time management and infrastructure [14]. Course design is defined as pedagogical competency apace with course application, support and assessment [15]. Course communication is defined as interaction between lecturer and students in online teaching [16]. To promote interaction between instructor and learner, tools such as discussion forums, emails, chats or live meeting should be utilized. Time management is how lecturer utilize their time on online teaching. Many researches such as [15] and [17] suggest that the ability to manage time efficiently contribute to the factor of success in online teaching. Lastly, infrastructure or infostructure is defined as the use of the technology in online teaching. Lecturers need to equip themselves with the ability to utilize the technology to ensure classes is conducted smoothly.

MATERIALS AND METHODS

Exploratory descriptive is undertaken in this study to understand the readiness of the lecturers teaching online. The target population for this study are lecturers who are currently teaching during COVID-19 pandemic spread. To prevent bias response, a probability sampling which is simple random sampling technique is applied to draw the sample of this study. The total number of participants in this study are 1137.

Questionnaire used in this study is adapted and modified from [18].The survey starts with 3 simple demographics' question that include school of the lecturer belong to, staff position in university and their teaching experience. Essentially, the questionnaire is divided into 4 themes. The themes in the questionnaire consist of course design, course communication, time management and infrastructure/infostructure. All the items under the 4 themes are measured using five-point Likert Scale ranging from 1 (strongly disagree) to 5 (strongly agree). Then, data is analyzed using descriptive analysis. Frequency, percentage, mean and standard deviation from the findings are calculated using IBM SPSS® software.

RESULTS AND DISCUSSION

Table 1 exhibits number of respondents from different school. The highest number of respondents comes from School of Languages, Civilization and Philosophy, occupies 10.8% in the total of respondent. This followed by 101 respondents from School of Business Management and 99 respondents from School of Economic, Finance & Banking respectively. The least respondent comes from National Golf Academy, Professional and Continuing Education Center and Center for Foundation Studies in Management, which consist of 5 respondents respectively. These 3 schools have least lecturers because lecturers are not belonging to those schools. Lecturers usually belong to other school, but they are doing admin task and

lecture for the National Golf Academy, Professional and Continuing Education Center and Center for Foundation Studies in Management respectively. Therefore, the number of respondents from these 3 schools are limited.

Table 1: School of Respondents.

School	Frequency	Percentage
National Golf Academy (AGN)	5	0.4
Islamic Business School (IBS)	45	4.4
Othman Yeop Abdullah Graduate School of Business (OYAGSB)	23	2.0
Professional and Continuing Education Center (PACE)	5	0.4
Center for Foundation Studies in Management (Pusat Asasi)	5	0.4
Co-Curricular Center (Pusat Kokurikulum)	45	4.0
School of Applied Psychology, Social Work & Policy (SAPSP)	43	3.8
School of Business Management (SBM)	101	8.9
School of Creative Industry Management & Performing Arts (SCIMPA)	16	1.4
School of Economic, Finance & Banking (SEFB)	99	8.7
School of Education and Modern Language (SEML)	54	4.7
School of Languages, Civilization & Philosophy (SLCP)	123	10.8
School of Multimedia Technology & Communication (SMMTC)	54	4.7
School of Computing (SOC)	94	8.3
School of Government (SOG)	49	4.3
School of International Studies (SOIS)	49	4.3
School of Law (SOL)	40	3.5
School of Quantitative Sciences (SQS)	69	6.1
School of Tourism, Hospitality & Event Management (STHEM)	39	3.4
School of Technology Management & Logistics (STML)	52	4.6
Tunku Puteri Intan Safinaz School of Accounting (TISSA)	111	9.8
UUM KL	16	1.4
Total	1137	100

Table 2 summarizes the number different position of respondent in UUM. Most of the staff position are senior lecturer, which consists of 567 respondents. Associate professor and lecturer occupy 19.3% and 11.9% of the total respondents respectively.

Table 2 Position of Respondents

Position	Frequency	Percentage
University Fellow	2	0.2
Language Teacher	65	5.8
Catering Teacher	3	0.3
Co-curriculum Instructor	42	3.7
Senior Lecturer	567	49.9
Visiting Lecturer	17	1.5
Part Time Lecturer	14	1.2
Lecturer	135	11.9
Associate Professor	220	19.3
Professor	51	4.5
Tutor	21	1.9
Total	1137	100

Table 3 shows the teaching experience of staff in the university. Most of the staff have at least 10 years teaching experience. Only a total of 30.4% of the respondent have 10 years or below teaching experiences.

Table 3 Teaching Experience of Respondents

Teaching Experience	Frequency	Percentage
1-5 years	159	14.0
6-10 years	187	16.4
11-15 years	350	30.8
16-20 years	180	15.8
21-25 years	155	13.6
More than 26 years	106	9.3
Total	1137	100

Table 4, Table 5, Table 6 and Table 7 exhibit theme of course design, course communication, time management and infrastructure or infostructure respectively. It can be seen clearly that “I am confident to create online assignments” has the highest mean among other items in course design. This align with most of the staff will upload or create assignments online from time to time. In course communication, “I am confident to send announcements/email reminders to course participants” has a mean of 4.19 and become the highest mean in course communication theme. Nowadays, skill of sending email to target audience is a standard requirement for most of the modern working space. “I am confident to schedule weekly hours to facilitate the online course” and “I am confident using UUM Online Learning to facilitate student’s learning” occupy highest mean in the theme of time management and infrastructure respectively. It can be justified because this is one of the routines that most university staff need to undergo.

On the other hand, “I am confident using LMS platform Web 2.0 tools to facilitate student learning”, “I am confident to provide feedback timely feedback on assignments”, “I am confident to use features in learning management system in order to manage time (e.g., online grading, rubrics, SpeedGrader, Flubaroo)” and “I am confident to use Webex for synchronous meeting” are the lowest mean in the course design, course communication, time management and infrastructure category respectively. One of the reasons is online teaching is quite different to traditional way of teaching which usually involve face to face interaction. This theory is supported by a few researchers including [19] and [20]. Besides, working from home is totally different from going to teach in university. Lecturers need to balance teaching and other task including giving feedback on students’ assignment and examinations in a timely manner while working from home. They can do it easily in class. In contrast, they need to utilize the technology and platform they are not familiar to perform the above task in a limited time. Likewise, Webex is the official platform UUM provides for synchronous teaching during the Movement Control Order (MCO). Lecturers may not be prepared because they do not have experience or training use this platform as they do not need to use Webex for traditional lecture. To sum up, more training needed to provide lecturers more confidence and ability in teaching online using and utilizing the information communication technology (ICT).

Table 4 Course Design

Item	Mean	Std. Deviation
I am confident to create an online course orientation (e.g., introduction, getting started)	3.88	0.872
I am confident to write effective learning outcomes	3.76	0.857
I am confident to create online quizzes and tests	3.77	0.976
I am confident to create online assignments	4.03	0.861
I can promote a safe, inviting, and mutually respectful learning environment by communicating with students in a positive tone.	3.88	0.848
I can encourage a safe, inviting, and mutually respectful learning environment by following and promoting Netiquette guidelines	3.81	0.860
I am confident using LMS platform Web 2.0 tools to facilitate student learning	3.48	0.978

Table 5 Course Communication

Item	Mean	Std. Deviation
I am confident to send announcements/email reminders to course participants	4.19	0.780
I am confident to create and moderate discussion forums	3.95	0.837
I am confident to respond to student questions promptly (e.g., 24 to 48 hours)	3.85	0.904
I am confident to provide timely feedback on assignments	3.77	0.880

Table 6 Time Management

Item	Mean	Std. Deviation
I am confident to schedule weekly hours to facilitate the online course	3.90	0.824
I am confident to use features in learning management system in order to manage time (e.g., online grading, rubrics, SpeedGrader, Flubaroo)	3.52	0.931
I am confident to spend weekly hours to grade assignments	3.81	0.864

Table 7 Infrastructure/Infostructure

Item	Mean	Std. Deviation
I am confident using UUM Online Learning to facilitate student's learning	3.81	0.919
I am confident that the IT infrastructure of UUM Online Learning is reliable and secure	3.49	0.980
I am confident to use Webex for synchronous meeting	3.33	0.948
I am confident to use other synchronous meeting tools such as Zoom, Google Hangout and Microsoft Teams	3.46	0.984

Table 8 summarizes the average for each theme in the questionnaire. Infrastructure or infostructure category have the lowest mean among 4 categories, which is 3.5209. Although online learning platform is available in UUM quite for some time, lecturers seems not confident enough to use and utilize all the features in online learning platform. Proper training is required to tackle this issue. Furthermore, online learning platform can be improved to more user friendly to attract more lecturers to utilize it. Also, new technologies such as Webex, Zoom Google Hangout and Microsoft Team should be integrated to the online learning platform seamlessly so lecturers in UUM can experience better online teaching and learning.

Table 8 Average for Each Category

Themes	Mean	Std. Deviation
Course Design	3.7978	0.74330
Course Communication	3.9384	0.74725
Time Management	3.7441	0.78478
Infrastructure	3.5209	0.79463

CONCLUSIONS

Carrying out an online class is easier said than done. Lecturer and student continue to grapple with capped data plans, slow internet connection as well as limited basic technology devices. This research work found that overall lecturers are ready to teach online using an online medium. Blessing in disguise the pandemic has force the lecturer to fully utilize the online platform as a medium for teaching and learning. As the result shown, a proper training is required for the lecturer to change. Embedding these lecturers with latest online learning tools and latest teaching pedagogy in technology is vital. Providing a stable and advanced technology for the online learning platform is vital. Full support from the university is essential to ensure all parties can change and move forward. Such act will warrant a better online learning experience for the student and lectures. The limitation of this study is only target one of the local

universities in Malaysia. Future research can include more universities into survey and test the correlation between variables stated in this study.

ACKNOWLEDGEMENTS

The authors would like to acknowledge the work that led to this paper, which was fully supported by the University Teaching and Learning Centre (UTLC), Universiti Utara Malaysia.

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