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A STUDY ON THE USE OF ONLINE LEARNING SYSTEM (OLeS) AMONG ACADEMIC STAFF IN PRIVATE HIGHER EDUCATION INSTITUTIONS

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ABSTRACT

Higher education institutions are undergoing significant transformations to remain competitive, enhance academic programmes, and adopt innovative teaching strategies aligned with global market demands. The rapid growth of Internet-based technologies has reshaped teaching and learning approaches, particularly through various forms of e-learning. Although traditional methods, such as face-to-face tutorials, remain dominant, institutions are increasingly investing in learning technologies to improve students' learning experiences. This study explores the use of an Online Learning System (OLeS) in teaching and learning among lecturers at Kolej Poly-Tech Mara Alor Setar. A qualitative approach was employed using semi-structured interviews and an analysis of online learning records. The study involved 41 lecturers and was conducted in November 2018. Thematic analysis identified three main themes: management support, positive attitudes of lecturers, and perceived benefits for students. Overall, the findings indicate that lecturers demonstrate positive acceptance of online learning, influenced by institutional support and perceived usefulness, contributing to improved teaching and learning practices.

Keywords: Online Learning, TAM, OLeS

1.0 INTRODUCTION

The education field has been proliferating for the past two decades, and the integration of electronic tools in the teaching and learning process is crucial in order to raise the standard of Malaysian education to meet the requirements of 21st-century learning. Furthermore, the existence of the Internet has become a medium in human life in terms of government,education, commercial, and other organizations (Zakariah, Alias, Aziz & Ismail, 2012). The Malaysia Education Blueprint (2013) highlighted ten shifts by the government to leverage information and communication technologies (ICT) to scale up learning quality across Malaysia. The three shifts–nation of lifelong learners, globalize online learning, and transform the higher education delivery–are important elements related to computer network-based environments. Additionally, Dasar e-Pembelajaran Negara 2.0 or National e-Learning Policy 2.0, launched by the government in 2011, is intended to support the 10th Malaysia Plan. One of the agendas is to develop world-class human capital by focusing on the 12 national key economic areas (NKEAs), particularly in the field of information and communication technology (ICT) (DePAN, 2010). DePAN (2010) highlighted two strategies for developing e-content: original e-content and open e-content (OCW). All higher institutions in Malaysia must ensure 25% of the courses offered in their institutions are developed through original e-content development by 2016-2020. By 2025, a higher education institution is expected to grow a minimum of 40% original e-content and 15% open e-content (OCW) content in its curriculum. Emerging concepts such as online learning or e-learning, which are used mainly in the higher education field, have led to multiple studies of adaptation and readiness among academics (lecturers and students). Web-based learning has become increasingly common in most higher education institutions and schools, often in the form of massive open online courses (MOOCs), virtual learning environments (VLEs), and learning management systems (LMSs) (Hajhashemi, Caltabiano, & Anderson, 2018; Hussain, Zhu, Zhang, & Abid, 2018). These learning environments have advantages as could

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Quality content associates the educational presentation of contents with a set of interactive tools specifically designed to support distance teaching and learning outside class hours (Al-Rahmi et al., 2018; Chew, 2015). In addition, online learning platforms provide opportunities for students to engage in a variety of activities and tests that can attract and enhance their focus and motivation in the learning process. (Al-Rahmi et al, 2018). Furthermore, findings from a study conducted by Daniel, Sarte, and Cruz (2019) highlighted that students felt relieved from the burden of carrying too many books and photocopying documents as online learning offered changes in instructional resources for teaching and learning. Therefore, the crucial elements of the successful implementation of e-learning technologies are influenced by the user's perception, followed by their skill and knowledge of operating the technology tools (Daud & Ghani, 2017).

According to Amin (2010), both lecturers and students have their own roles in using the electronic learning system provided by the institution to ensure that all programs in their institution run effectively with the latest technology provided by the ministry. According to Gilbert (2015), web-based teaching and learning fall into three categories: fully web-based, blended format, and traditional courses using web-based supplements. To fulfil the Malaysia National blueprint 2013-2025, Kolej Poly-Tech Mara (KPTM) Sdn Bhd stepped forward by taking the challenge to provide teaching and learning using an electronic platform. Thus, Kolej Poly-Tech Mara (KPTM) Sdn Bhd encouraged lecturers to use the KPTM Online Learning System (OLeS) since 2010 (Marsam & Amin, 2013). College management has encouraged lecturers to use the OLeS, which is marked as one of the criteria in staff evaluation. Since 2016, college management has shown commitment and effort by sharing knowledge among lecturers about the use of OLeS. However, in KPTM, web-based learning is categorized as a traditional course using web-based as additional teaching sources. Most teaching and learning activities use face-to-face in the classroom, and online activities become additional supplementary material for traditional study.

However, several previous studies revealed inconsistent results regarding students and lecturers adoptation and readiness on the uses of online learning for teaching and learning (Ahmad & Adams, Sumintono, Mohamed & Noor, 2018; Chua, 2015; Daud & Ghani, 2017); Haron & Rahman, 2012; Marsam & Amin, 2013). Additionally, there were several limitations regarding the use of online learning for teaching and learning, such as a lack of computer literacy skills and motivation. (Kamalodeen, Figaro-Henry, Ramsawak-Jodha, & Dedovets, 2017; Oliver, & Townsend, 2013). Furthermore, another big question is how ready lecturers are for online learning instruction as they struggle to adapt to the change from the traditional classroom to the virtual classroom and the lack of high-speed internet connection in their institution (Ahmad & Adams, Sumintono, Mohamed & Noor, 2018). Therefore, this study aims to explore the use of online learning systems (OLeS) in teaching and learning processes among lecturers in Kolej Poly-Tech Mara Alor Setar by addressing the issues of lecturers and management readiness in terms of competency, support, and training. Hopefully, the findings from this study will be able to provide a clear sense of direction for the obstacles that are frequently faced by lecturers when integrating online learning into their lessons.

2.0 LITERATURE REVIEW

According to Garrison (2011), e-learning or electronic learning refers to any electronically mediated asynchronous and synchronous communication for the purpose of constructing and confirming knowledge. Technology tools has helped students carry their own personal small computer such as laptop, Personal Digital Assistants (PDAs), tablets, cell phones and e-book readers (Monther, Liyana, Norjihan & Elaheh, 2017). Meanwhile, online learning, which is a technology-based student-centered learning approach, refers to teaching and learning settings that employ networked computer-mediated communications (CMC) technologies, including the World Wide Web (Internet) and course management systems (CMS), and can be accessed through satellite, cable, broadband, or wireless technologies (Kidd, 2008). In this study, an online learning system (OLeS) was defined based on these three terms that are widely used in the research area.

The use of e-learning promoted a student-centered approach, which changed the landscape of the education field with great flexibility in teaching strategies, interaction between students and teachers, and students' assessments (Rasouli, Rahbania, & Attaran, 2016). Many Malaysian higher education institutions have committed to implementing e-learning because of its effectiveness compared to the traditional classroom method of teaching (Ahmad & Chua, 2015). To fulfil the needs of Generation Y, instructors need to adopt different roles as facilitators who monitor their classroom activities, as opposed to being a source of knowledge who spoon-feeds their learners as in previous generations (Riasati et al., 2012). The modifications of approaches used in the teaching process have led to the different character of learners from passive individuals to active individuals that are responsible for their own learning process with minimal supervision from the instructor in the class (Alsied & Pathan, 2013). The shift in teaching approaches provides good opportunities for creative and dynamic educators to plan suitable classroom activities that can boost their learners motivation and performance in learning by maximizing the production and authentic interaction among learners.

However, there were some issues that hampered the lecturers' use and adaptation of e-learning in the teaching and learning process. According to Sabzian and Gilakjani (2013), lecturers' competency in their technological skills is one of the elements that impact lecturers' use of e-learning in the classroom. Competency is important to ensure that the lesson is not in vain because of the instructor's incompetence in operating the technologies during the lesson. Constant observation, workshops, and continuous support for lecturers on technology integration into teaching will increase lecturers' competency. Hismanoglu (2012) cited that lecturers are the essential individuals to apply e-Learning in an educational setting efficiently; so it necessary to provide appropriate training and support to cultivate the culture of ICT integration into their classroom. According to Cheok, Wong, Ayub and Mahmud (2017), existing educators are unable to make important changes in their classroom practice due to a lack of support and professional development to help them infuse technology into their classrooms. Besides, there is considerable evidence that teaching online requires additional preparation time, and this has been labelled as "daunting", "painful", " stressful" by many educators at each level of the education system (Kidd, 2008).

According to Elkaseh, Kok, & Chun (2015) the successful implementation of e-learning based on the users' perception, skills and knowledge of using the computer. Several studies have employed the Technology Acceptance Model (TAM) in technology acceptance and implementation in the information system area and particularly in e-learning (Al-Adwan, Al-Adwan & Smedley, 2013; Hanif, Jamal & Imran, 2018). The technology Acceptance Model (TAM) introduced by Davis (1986), widely used models to explain user acceptance behaviour (Hanif, Jamal & Imran, 2018). Moreover, according to Davis (1989) there were five constructs in the original TAM known as perceived usefulness (PU), perceived ease of use (PEOU), attitude, and behavioural intention to use. Among the constructs, PU and PEOU form an end-user's beliefs on a technology and therefore predict his or her attitude toward the technology, which in turn predicts its acceptance (see Figure 1).

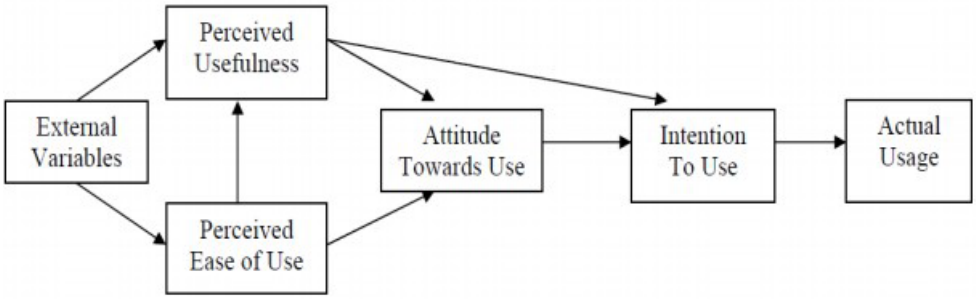

Figure 1: The Original Technology Acceptance Model by Davis (1989)

According to this model, system use is a response of users' motivation which is directly influenced by a system's specific features and capabilities which able to inform stakeholders to identify barriers and enablers to adoption of any new technology (Davis, Bagozzi, & Warshaw, 1989). This model posits that user motivation can be explained through perceived usefulness (PU), perceived ease of use (PEOU) and attitude toward a system (Cheok, Wong, Ayub & Mahmud, 2017). According to TAM, the attitude that users formed toward a system will determine if users will accept or reject it (Davis, Bagozzi, & Warshaw, 1989). The two factors include in the Technology Acceptance Model known as perceived usefulness and perceived ease of use which relevant to explain the lecturer use of online learning in Kolej Poly-Tech MARA Alor setar. TAM has been used by researchers worldwide to understand the acceptance of different types of information systems such as elearning system (Shafeek, 2011), online shopping acceptance model (OSAM) (Zhou, Dai & Zhang, 2007), e-commerce (Pavlou, 2003), and online banking (Pikkarainen, Pikkarainen, Karjaluoto & Pahnila, 2004).

3.0 METHODOLOGY

This research was conducted in November 2018; employed a qualitative approach; whereby data collected through semi-structure interviews as the primary method and online learning records as a secondary method. The primary method used a semi-structured interview with the aimed of gaining rich information for this research. Moreover, by using the qualitative method the intent is not to generalize to other population but to develop an in-depth understanding of the issues (Creswell, 2012). An individual interview session was carried out with each selected participant and took approximately one hour and was carried out in the Kolej Poly Tech MARA Alor Setar. Meanwhile, Online Learning System records logs was collected with permission from the college management to be included as part of this study. The sampling design used by the researcher in this study was purposeful sampling (homogeneous sampling). For semi-structured interview, the researcher selected six lecturers out of 41 lecturers (2 lecturers from each department) because

the researcher was interested in those lecturers who consistently received acknowledgement from the management as active users of Online Learning System (OLeS) since January 2018. Furthermore, these six lecturers were chosen based on several characteristics such as teaching at the same higher institution in KPTM Alor Star, Kedah; permanent academic staffs, and has more than five years of teaching experience. Based on Creswell (2012), homogenous sampling used by the researcher who purposely selects individuals and sites based on the needed characteristics. Hence, Creswell (2014) stated usually for qualitative design; there is no specific number of sites or participant for the sample size. For the secondary method, all 41 Lecturers (6 male & 35 female) from various fields of expertise were selected as sample. The secondary data used to triangulate the primary data collection.

The Thematic analysis as suggested by Braun & Clarke (2006) was employed in analysing data obtained from the semi-structured interview. Braun & Clarke (2006) suggested a six-phases guide for conducting thematic analysis likely become familiar with the data, generate initial codes, search for themes, review themes, define themes, and write-up. For this study, researcher had recorded the interview, transcript the audio, code or identify the main ideas of the audio into a suitable theme, and later explained each of the code in details supported by previous studies that related to the topic. Meanwhile, data obtained from online learning records were analysed using Descriptive analysis to report the percentage of activities done by each lecturers; to support data collected through semi-structured interview.

4.0 FINDINGS

4.1 Semi Structured Interview

Several themes emerged from our analyses of the semi-structure interview. The findings were summarized and organized by those as mentioned three main themes.

4.1.1 Management Encouragement and Support

Most lecturers recognized that college management has created great interest among the lecturers. Beside interest, on-going training and sharing knowledge conducted regularly to enhance lecturer awareness on the uses of the online platform to gather students' interest and focus toward the learning process. These on-going training and workshop help to improve their technology literacy and pedagogical knowledge to suit the technology uses and students' need. Below are two evidences from the interview conducted:

> *"I had joined training inside and outside the college. My college even sent me to join workshop conducted by UUM on e-learning, m-learning and MOOC. I triggered my interest to explore deeper how to integrate all these technologies with my lesson".*

> *"I only joined OLeS workshops conducted every semester by my institution; then I mostly explored myself through Youtube or Internet. We can get everything from the Internet nowadays just work smart".*

4.1.2 Lecturer's Positive Perception

Lecturers expressed their viewed regarding the biggest challenge of while integrating online learning in their teaching and learning. They claimed their tasks became double as they need to spend additional hours for online learning and this material preparation usually required them to use their personal times after working hours. Below is the quote from the interview session:

> *"The biggest challenges for me when utilized online learning requires a big amount of personal times from the lecturers for preparation. Example when I want to set MCQ exercises on OLeS, it required me to spend more time to explore; try and error before able to create that."*

Meanwhile, respondents mentioned their problem to cope the teaching pedagogy with the online technology.

> *"I still struggle to match my teaching approaches with the use of online learning. It not only about the technology being used but also reflect on the way of interaction with students, formality. Sometime I did feel pissed off with students because they are expecting me to give feedback immediately after complete the task given".*

> *"The classroom management was not similar to the uses of online learning. The tendency of internet fraud and games addiction higher. There were times, I asked students access OLeS but*

they caught red-handed played games and watched Youtube. But it only a few students behaving in the ways".

Despite the challenges the lecturer faced while integrating online learning in their teaching and learning; they still showed good effort to enhance their technological and pedagogical skills in order to improve their teaching skills. Below are the evidences from the interview session:

"I joined many workshops related to MOOC conducted by other higher institutions.. All these workshops cost me a lot but I willing to pay as I give benefits for my teaching approaches. My institution also conducted workshops regarding OLeS but more on a beginner level, so I took my own initiative by joining workshop conducted by other institutions".

"I didn't attend any formal training. But I loves to explore and update myself with new technologies for teaching and learning and I am lucky to have a friend that is also teaching in other institutions so we always exchange and share ideas regarding e-learning and how to maximize the benefits for my students".

4.1.3 The Benefits of Online Learning toward Students

Participants in their interview session made it clear regarding their belief regarding the effectiveness of online learning being used by students while doing their assignment, exercise, tutorial, or presentation. Below are some responses from respondents:

"Online learning benefitted my learners in term of interaction; I can say they are more confidence in interacting and sharing their opinion in an online platform compared face-to-face in the classroom. I sometimes quite shock to realize a shy student become darling in throwing opinion and commenting about their friends' task compared in the classroom when they look a bit passive to me".

"Students able to access English materials worldwide and able to imitate the native speaker pronunciation. It helps to bring the gaps between native and non-native speakers. Some of the students able to make friends for native speaker countries and keep on interacting with them in order to improve their English proficiency".

"Without the use of online learning I aware my students tend to easily fall sleep or being bored after 30-45mins; but now when I started to integrate online learning with plenty of quizzes, exercises, interesting illustration and notes; it makes learning more fun and interesting. By having the technology the boring subject can become more interesting with virtual lessons, through a video, or when using a tablet".

4.2 Online Learning Record

Table 1 has reported 100% lecturers in KPTM Alor setar were the active users of OLeS. The lecturers being classified as an active user if they conducted at least five activities in the online learning environment for per semester.

Table 1. *Active Users of OLeS Usage (January 2018 Session)*

Status/ Department	Computer Science & Mathematic Department.	Accounting & Management Department	General Studies Department
Active	13	15	13
Inactive	0	0	0

Figure 2 illustrated the types of activities conducted by the KPTM Alor Setar Lecturers through the online learning environment. Sharing notes was the activity highly conducted by lecturers, whereas others activities like assignments, quizzes and graded reports also being used by some of the lecturers.

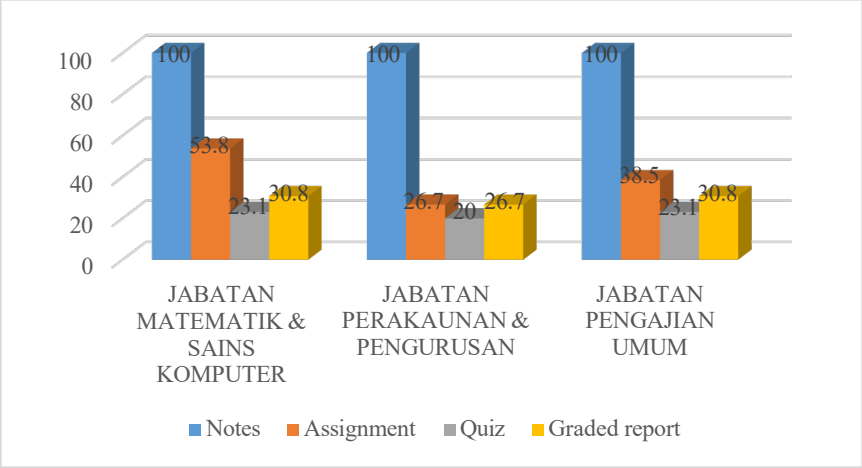

Figure 2. Types of Activity Conducted by Lecturers

5.0 DISCUSSION AND CONCLUSION

This study conducted on the use of online learning system (OLeS) in teaching and learning process among lecturers in KPTM Alor Setar. The result is based on collected from the semi-structured interview, and online learning records showed a positive attitudes among the academic staff. The finding of the semi-structured interview revealed three main themes which are management encouragement and support, lecturers' positive perception and the benefits of online learning towards students.

Firstly, the management encouragement and support could be seen through their effort on conducting the on-going workshop, financial assistance to attend workshop and training, management acknowledgement to the lecturer that actively use online learning system. This high commitment from management has enhanced the lecturer' competency on the use of online learning. This supported by the study by Baran, Correia & Thompson (2013) highlighted that it was critical to listen to instructors' voices and give them ample support and participatory role in order to form successful online teaching and learning. Secondly, the lecturers' positive attitudes towards the use of online learning give impact on their active use of online learning. In addition, there was another reason for the lecturers' positive attitudes toward the use of online learning among lecturers which is the effectiveness of leadership. The college administrator facilitates access to ICT by teachers, students and the administrative staffs and always try to improve the facilities times by times. Furthermore, lecturers were encouraged to participate in seminars, workshop and professional development program related to the online or mobile learning organized by other institution. Previous studies suggested the attitudes of educators and learners towards e-learning in an educational context was a strong predictor in benefiting from e-learning as well as having an impact on their success (Erarslan & Topkaya, 2017; Rhema, Miliszewska & Sztendur, 2013). Thirdly, the finding revealed the active uses due to the facts every lecturers believe the online learning brings more benefits than harms toward their students. Due to the lecturers belief, the lecturers keep on using online learning even encounter some problem while integrating it in their lesson. The lecturers believe the use of online learning able to attract their students to become the focus on the teaching and learning process. The lecturers able to make variation in teaching process using online learning; through simulations, digital gaming and online quizzes and assignments. Yap (2016) highlighted the use of Internet or technologies able to enhance students' learning experiences and engagements between learners or lecturers. Nguyen (2015) stated that online learning provides a world class education to anyone, anywhere, and anytime as long as they have access to the Internet. These three themes supported by data from online learning records that showed 100% of lecturers in KPTMAS are an active user of OLeS.

These three themes support the two elements in the Technology Acceptance Model (TAM) which are perceived usefulness and perceived ease of use. The high adaptation on the online learning due to the fact the lecturers believe using online learning enhance their students and their quality of teaching (Perceived Usefulness) and the online learning easy to use compared to the traditional method (Perceived Ease Of Use). In Conclusion, both lecturers and institution management have their own role in promoting and implementing online learning in the higher level institutions. Lecturers are encouraged to develop their competency on technology skills or more technology-integrated lesson while institutions are advised to provide better and sufficient technology tools or facilities to be fully utilized by lecturers. The cooperation between instructors and institution administrative will produce more effective technology integrated lesson that could attract and motivate students in the learning process.

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