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The Students' satisfaction toward technology usage during online teaching and learning in private higher institution.

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Abstract

Technology in the education system in Malaysia has changed 360 degrees from face-to-face learning to online learning. Among the widely used methods are Google Classroom, Google Meet, Zoom, and Microsoft Team. The education system in Malaysia has experienced a full transformation since the Ministry of Education Malaysia announced the Home-Based Teaching and Learning in 2020 (PdPR). The online instruction integrated with Home-Based Teaching and Learning (PdPR) for the sake of students' safety also to none of the students fall behind in their studies whether from urban or rural areas. However, the effectiveness of certain technologies used in online teaching and learning is still needed. The uses of some existing learning systems such as Skype, Google Meet, Zoom, Webex, and Google Classroom are able to achieve meaningful teaching and learning. Therefore, this study was conducted to examine the students' satisfaction toward technology usage during online teaching and learning in private higher institution. The sample of this study was based on questionnaires collected from 547 of students in the Kolej Poly-Tech MARA, Alor Setar. The study found that the use of appropriate and effective technology gives satisfaction to students in online learning in private colleges. This study are likely to help private institutions, to identify students' satisfactions and preferences towards technology use during online teaching and learning.

Keywords: Technology, online teaching, online learning, private college

1 Introduction

Currently, the technology in the education system in Malaysia has changed 360 degrees from face-to-face learning to online learning. The education system in Malaysia has experienced a full transformation since the Ministry of Education Malaysia announced the Home-Based Teaching and Learning in 2020 (PdPR). This is in response to the Covid-19 epidemic, which began in late 2019 and had affected the entire world. The world is currently shocked by the Covid-19 Outbreak (Coronavirus Disease), which has been claimed to originate in Wuhan, China, since December 2019. (Lee, 2020). The Covid-19 pandemic has had a significant impact on the tourism industry, as well as the country's educational system. The Malaysian education system has changed as a result of the Prime Minister's announced the Movement Control Order (MCO).

The online instruction is applied with Home–Based Teaching and Learning (PdPR) for the sake of students' safety and academic performances whether they live in an urban or rural area in Malaysia. This is in line with the improvement of technological systems that aid the teaching and learning process (Hamdan et. Al. 2013). Among the widely used methods are Google Classroom, Google Meet, Zoom, and Microsoft Team etc. Online teaching and education is nothing new in the education field. Many developed countries in the world have implemented online learning including Malaysia. (Maknun 2013; Fristchi and Wolf, 2012; Raymond and McKimm, 2010).

2 Online Learning

Both public and private universities have implemented online learning. For similar reasons as in China, several colleges have decided to phase out face-to-face learning in favour of online learning for students and faculty (Wang et al. 2020). However, several colleges in Indonesia, have suspended classes in favour of online learning, including those in Germany, Korea, and the United Kingdom (Fatoni et. Al. 2020). The process of adapting online learning in the current education systems has been done in a variety of ways and strategies.

Technology systems identified to support the teaching and learning process have been embedded in online learning in educational institutions such as institutions of higher learning as well as schools (Hamdan et. Al, 2013). However, the implementation is still not comprehensive and requires more strategies for educational institutions. This is due to lack of infrastructure facilities especially in rural areas, and low awareness of the importance of educational technology among students, parents, teachers

and administrators (Hamdan et. Al, 2013).

There are many studies regarding the advantages and disadvantages of technology in teaching and learning (Aboagye et al., 2020; Fatoni et al., 2020; Arkorful, 2014; Nazarlou, 2013; Cantoni et al. 2004). Internet-based learning is an alternative to traditional learning during the Covid-19 pandemic. It becomes an important essential element for sustaining school and university activities (Abou et. al, 2014). Suresh et. al, (2018) in his study said that online learning platforms bring benefits to students when they are used as a complementary tool for traditional educational processes. Students sometimes face technical problems and feel that the traditional way is much better (Alsaaty et. al, 2016), however, generally they have a positive attitude towards online learning (Burac et. al, 2019; Odit-Dookhan, 2018; Lochner et al. al, 2016]. This is because online learning provides benefits such as better outcomes in assimilating information (Navarro & Shoemaker, 2000; Stern, 2004), flexibility (Stern, 2004), student centralization (Al-Dosari, 2011), and saving space and time and a platform for exchanging opinions (Arkorful & Abaidoo, 2014).

However, the effectiveness of the use of certain technologies in online teaching and learning is still needed. The use of technology for non -technical courses such as business management, accounting, office management and tourism management might be easier. The use of existing learning systems such as Skype, Google Meet, Zoom, Webex, Google Classroom is useful to achieve meaningful learning. However, for technical courses such as Computing systems, the existing system holds many questions regarding its effectiveness to fulfil students' satisfactions on meaningful learning or otherwise. Concerning that, this study was conducted to examine the Students' satisfaction toward technology usage during online teaching and learning in Kolej Poly-Tech MARA, Alor Setar.

The findings of this study are likely to help private institutions, to identify students' satisfactions and preferences towards technology use during online teaching and learning. It is also intended that to inform lectures of the students' struggle and difficulty with online learning. As a result, the lecturer could consider their teaching approaches or methods to assist their students who are having difficulty learning online. For this study, a self-completion questionnaire was developed and circulated via Google Form to the Kolej Poly-Tech MARA, Alor Setar's students. It is more convenient as it gives participants more freedom in terms of space and time while completing research questions. The questions were created based on the research objectives that were constructed and adapted from previous studies by Coman et al. (2020). The questionnaire developed for this research was divided into four sections, Sections A-D. Data collected in Section A required the respondents to provide detailed information related to them. In Section B, the respondents were requested to provide their perception about the way college managed to provide knowledge in the context of exclusively online learning. Section C is comprised of seven questions related to the students about their perception of the ability to learn and assimilate information in the context of exclusively online learning. In Section D, the respondents were required to provide their perception about the use of E-learning platforms in the process of exclusively online learning.

3 Analysis and Finding

Online questionnaires were distributed to Kolej Poly-Tech MARA, Alor Setar's students and 547 useful responses were recorded. The demographic characteristics of the respondents are presented in Table 1. The results show that 418 of the respondents are female students, while there are 129 male students. 190 (34.7%) of the students are semester 1 to 2, 230 (42%) are semester 3 to 4, 106 (19.4%) are semester 5 to 6 and 21 (3.8%) are semester 7 and above. Over 70.4% (385) of the students are age 18-19 years, 26.7% (146) are age 20-21 years, 2% (11) are age 22-23 years and 0.9% (5) are age 24-25 years. The results also show that 84 (15.4%) students from Diploma in accounting program, 198 (36.2%) students from Diploma in form Diploma in the business management program and 46 (8.4%) students from Diploma in computer system and networking.

	Items	Frequency	Percentage
Gender	Female	418	76.4
	Male	129	23.6
	Total	547	
	1 - 2	190	34.7
Semester	3 - 4	230	42.0
	5 - 6	106	19.4
	7 - >	21	3.8
	Total	547	

Table 1: Demographic Profile of the students.

	18 - 19	385	70.4
Age	20 - 21	146	26.7
	22 - 23	11	2.0
	24 - 25	5	0.9
	Total	547	
	Diploma in Accounting	84	15.4
Program	Diploma in Office Management	198	36.2
	Diploma in Tourist Management	61	11.2
	Diploma in Business Management	158	28.9
	Diploma in Computer System and Networking	46	8.4
	Total	547	

The students' perceptions about the way colleges delivered teaching input in the context of exclusively online learning are examined in terms of the difficulties they encountered while the courses were delivered online. The questions are measured using Likert Scale consists of not at all (1), rarely (2), not rarely (3), not frequently (4), frequently (5) and very frequently (6). As a result, there are not rarely difficulties while connecting to the platform. And there are also not rarely losing signals during video teaching and not rarely delayed visualisation of messages communicated on the platform. Further, there are rarely the sound is not clear when college managed online learning. The detailed result can be seen in Table 2.

	Not	at all	Rarely Not rarely		rarely	Not frequently		Frequently		Very frequently		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Difficulties while connecting to the platform	54	9.9	133	24.3	162	29.6	127	23.2	51	9.3	20	3.7
Losing signal during video teaching	47	8.6	110	20.1	136	24.9	117	21.4	86	15.7	51	9.3
Delayed visualization of messages communicated on the platform	68	12.4	137	25	154	28.2	113	20.7	59	10.8	16	2.9
The sound is not clear (there are interruptions)	74	13.5	141	25.8	116	21.2	115	21	72	13.2	29	5.3

Table 2: The Management of College

There are several methods used in online teachings such as audio teaching, video teaching, documents posted on the platform (MSc word, pdf, Powerpoint), chat discussions and others. However, it is ensured to what extent the following methods are used to teach online courses on E-learning platforms. Thus, as a result of this research, audio teaching is not rarely used in online teaching, the video teaching method is not frequently used, documents posted on the platform (MSc word, pdf, PowerPoint) is very frequently used in online teaching, chat discussions is frequently used, URL address is not frequently used, tasks in work/ pdf format is frequently used, task posted in databases and documents were the whole class could work on in the same time is not frequently. The detailed result can be seen in Table 3.

Table 3: Methods used in teaching online.	
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	Not at all		Rarely		Not rarely		Not frequently		Frequently		Very frequently	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Audio teaching	39	7.1	64	11.7	146	26.7	135	24.7	96	17.6	67	12.2
Video teaching	23	4.2	48	8.8	99	18.1	140	25.6	117	21.4	120	21.9
Documents posted on the platform (Word, Pdf,	23	4.2	42	7.7	64	11.7	99	18.1	132	24.1	187	34.2

PowerPoint)												
Chat discussions	15	2.7	36	6.6	90	16.5	128	23.4	159	29.1	119	21.8
URL addresses (to other web sources)	33	6	51	9.3	134	24.5	165	30.2	118	21.6	46	8.4
Tasks in word/pdf format (that only the lecturer could see)	40	7.3	52	9.5	101	18.5	115	21	134	24.5	105	19.2
Task posted in databases (that were seen by the entire class)	28	5.1	50	9.1	109	19.9	154	28.2	122	22.3	84	15.4
Documents were the whole class could work on in the same time	13	2.4	40	7.3	99	18.1	153	28	134	24.5	108	19.7

This study also shows that there are most of the equal structures in theory and practice of the courses taught online in college. In addition, there are not less time or extra time in ever since courses began to be held online, the students have their study and project preparation. The online environment should be suitable for education and training at college level is seen nor in small, nor in great extent. Students are also seen to prefer to offer a written answer on forum or chat to interact with the lecturer, when they are in the right position to answer the lecturer's questions. The students find it nor easier and nor harder to present compared to the presentation of projects in classrooms, when they present a project online.

Most students feel that the acquisition and assimilation of information sent by lecturers, in an online environment it is easier for them to process information when the course is held with video and audio. They also feel that compared to face-to-face taught courses, during online classes for them it is neither easier and nor harder to assimilate information. In this study, platforms such as discord, webex, skype and zoom are not students 'choice in conducting online learning. In fact this study found that most students preferred google meet platform to be held during online classes. The detailed result can be seen in Figure 1.



Figure 1. Chart of Preferred Platform

4 Conclusions

The use of appropriate and effective technology gives satisfaction to students in online learning in private colleges. The college management and lecturers need to keep up with current methods or technology to provide effective teaching and learning to students. Most Kolej Poly-Tech MARA Alor Setar's students also prefer a combination of online and offline courses in their teaching and learning process. This is because they never utilised the E-learning platform during their face-to-face learning, and were only exposed to it due to Covid-19. So, to familiarize themselves with online teaching and learning, they prefer a combination of online and offline teaching and learning. Although there are many platforms that can be used for online classes such as skype, zoom, avaya, e-learning and discord, however, most of Kolej Poly-Tech MARA Alor Setar students preferred the online learning to be held using the Google Meet platform to replace face-to-face classes. Google Meet platform is seen as more user friendly and easy to access. Additionally, with extension improvements such as meet attendance list, meet auto admit, meet board and meet plus, it makes the Google Meet platform more practical and effective.

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