Challenges and the Impact of Covid-19 Pandemic on Higher Education Universities in Klang Valley, Malaysia

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Abstract: *This paper discusses the standard of online higher education, which is often the subject of scepticism and criticism. Does the teaching and learning in virtual classrooms offer the same experience as in traditional classrooms? This is the question asked most often by university stakeholders. The most recent literature analysis showed that much research has been carried out on the use of technology in virtual education in terms of cost and improved productivity and online pedagogy. This study is based on the current literature on the quality of online e-learning in higher education, investigates the different perspectives on the issues and the challenges of online teaching and learning and proposes a quantitative framework that could improve the online teaching and learning process and its outcomes. There is a need to establish a structure within universities to enhance the quality and efficacy of online higher education. The proposed structure offers realistic guidelines on the quality assessment of online teaching and learning. The objectives of this study are achieved through a literature review, questionnaire survey and SPSS statistical test. The findings of the questionnaire survey are evaluated using descriptive and frequency statistics. The result showed that most users of the e-learning platform in Malaysia face difficulties and challenges. Even though most respondents are willing to adopt the new methods of conducting lessons using the e-learning platforms, there is a need for proper implementation and improvement of the online learning strategies during the COVID-19 pandemic because the students and lecturers do not have any other alternatives. The education sector in Malaysia would reach a new level once they have achieved the advantages and benefits of the e-learning platform.*

Keywords: Online Learning, Improvement of online higher education, Challenges of Online Learning and Advantages Online Learning

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1. Introduction

e-Learning is a platform that enables students to take part in the educational process without being actively and physically present in the same place as the instructor. The exponential increase in the number of courses and programs offered through online learning has a significant influence on the teaching and learning of ideas and beliefs. Over time, web-based coursework has become a norm and an important teaching method, especially in the present-day in higher education [1]. The availability of online learning, the courses offered, and the increasing number of registered students speak to the significance of this form of instruction. In recent years, the growth of e-learning programs is driven by the tremendous improvement of the Internet that facilitates online education that changes the landscape of normal education.

However, while the implementation of online learning involves technical innovation, it is not sufficient to ensure the success of online learning [2].In the era of globalisation, students have different learning styles; some students learn much better by watching and listening, some learn by reading, and others by doing and moving or in a hands-on practical environment [3].Therefore, it is essential to take into account the different learning styles when developing an online course. This paper will discuss the issues and challenges faced by the students and lecturer participating in online learning. The information generated by the instrument can identify the problems in online learning and are useful in planning and teaching through the e-learning platform.

2. Problem Statement

The effectiveness of online learning has been an issue for students and lecturers for quite some time. Attempts to adapt to online learning failed because of the distinct problems that may occur during online learning. Even though the schools and universities in Malaysia have adopted online learning, the degree of its implementation is very low. The low acceptance of online learning in higher education in Malaysia is due primarily to technical barriers. Although Malaysia is considered a developed country, it has not achieved full technological advancement. For instance, technical issues such as Internet connectivity and hardware capabilities are among the key barriers in implementing online learning. Each person may have a different Internet package and hardware capabilities. Besides, the poor connection in some areas contributes to the ineffectiveness of online learning. Problems such as a drop in connection, latency and poor Internet signal are very common. Studies have shown that the distractions that occur during the lessons affect the effectiveness of knowledge absorption. Moreover, conventional face-to-face learning is still very much the preferred method of learning [4].

The human factor is one of the issues affecting the effectiveness of online learning. Under normal circumstances, lessons are carried out face-to-face, making them more engaging. In online learning, however, there are many unpredictable distractions such as interruption of internet connectivity affect the learners concentration although the technological advancement makes it possible to achieve many things in a matter of seconds.

3. Literature Review

Issues and Challenges of Adopting Online E-Learning in Higher Education during Covid-19 Pandemic

COVID-19 hits Malaysia in a blink of an eye during the start of 2020. As the case rising and affecting the people, the government has to take preventive actions of implementing Movement Control Order (MCO) to break the chain of virus spreading in our country. There are multiple restrictions namely; no social interaction allowed, no mass gatherings and etc. with these restrictions, many businesses along with education sector and part of the country's economy were deeply affected. The people are encouraged to stay home as much as possible [5].

With the movement control order being implemented in Malaysia, schools, colleges and universities will stop operate as there will be no face-to-face lesson for the rest of the year [5]. This sudden change highly affects student's lesson and semester. However, with more technological advancement and facilities available with higher education, colleges and universities decided to implement full online e-learning as the part of continuation of lessons [6]. With that being said, everyone including the staff, professors and even the students were

unprepared for this full online e-learning platform as they are not fully utilising the platform in the past.

The key component of implementing online e-learning is the internet connection. Without internet connection, online e-learning is virtually impossible [7]. With that being said, most of the students in Malaysia will have some sort of internet package that they subscribed, whether it is mobile data, broadband or even home Wi-Fi. However, high usage of internet mobile data might limit the student's approach on online e-learning due to the amount of quota limitation that students subscribed for. This is because, not all students can afford high speed, big quota data or even WIFI at home as these internet packages are not very affordable towards certain students.

Lack of instructional intimacy associated with face-to-face conventional delivery systems in traditional classrooms
The Movement Control Order (MCO) in Malaysia limits out all possible social interaction. We are forced to move things towards the online platform whereby there is no face-to-face conventional social interaction to avoid the spread of COVID-19 virus, same goes to the higher education sector [5]. This means there will be less intimacy when conducting lessons through online e-learning. The key difference before the strike of COVID-19, during the normal semester, lessons conducted are in person and not through a screen. This is important because it helps students to pay more attention when the professor is in the same room as the students. Students actually get more out of what the professors are teaching when they are able to see the professor's body language, and it's more a personal experience.

The transition from face-to-face to online e-learning platform had significantly removed the opportunity to learn from their peers. In a usual classroom environment, there is a level of intimacy that just cannot be develop in an online setting. The higher education experience is truly about making human connections. This online setting had taken out so much of the student's experience of learning in an interactive environment [8]. There is no direct intimacy on learning and problem solving during online e-learning and that might limit student's eagerness and passion to learn and to ask and question the professor.

Benefit of implementing of adopting online e-learning in higher education in Malaysia
Students are free to juggle their jobs and school because they are not bound to a fixed timetable. Class meeting times are set in a traditional classroom setting, and the student has no control over this, forcing them to work their timetables around these dates [9]. However, with flexible time comes with high commitment. Student whom opt with online e-learning should have higher commitment which enables them to have control over their own time [10]. Besides, location is also not an issue when it comes to online e-learning [11] students are able to study virtually anywhere as long as there is an internet connection. This does not tie down students to have always travel and have a fix study environment like the usual classroom-based lesson.

Furthermore, students can adjust their pace based on their own capability without following others. Some student does not really like to ask their professors to repeat the lesson made in previous lecture or ask deep specific questions. With that, students can work on the existing materials given by their respective professors by revisiting, pause or repeat the pre-recorded lectures. Students are able to digest and understand more without any time restriction. This added flexibility enables online learners to move at their own pace through the course and get the most out of the degree programme.

4. Research Methodology

The main objective of this study is to identify the challenges and the impact of COVID-19 on Higher Education in klang Valley such The University of Malaya (UM), University Putra Malaysia (UPM), The National University of Malaysia (UKM),Tunku Abdul Rahman University College (TARUC) and City University Malaysia. Even though the essence of online learning is not essential to the results of this survey, it provides some context.

The study adopted exploratory approach which is the most effective method for understanding the personal learning experiences of individuals. The distributed questionnaires seek to achieve the main goal while giving the respondents the autonomy to define their experiences and allowing new themes to emerge. The respondents of this survey are the students and lecturers at the institutions of higher learning in Klang Valley Universities.

For this study, data collection strategies are composed of primary and secondary data. The primary data for this study were obtained using the survey questionnaires. Survey questionnaire approach is adopted for collecting information via email through digital questionnaire forms about the research goals in the Klang Valley region of Malaysia. Since this is their first experience learning online, efforts were made to ensure that all variables were identified during the survey. The data were collected over two months.

The design of questionnaire is based on our research objective along with collection of respondents' general information. To obtain a more detailed analysis with greater precision, both the descriptive statistics and the inferential statistics be added to this finding. Independent sample t-Test for the inferential statistics been performed.

5. Results and Discussion

The Issues and Challenges of Online Learning
Table 1 shows the most common issues and challenges the students faced with online learning is 'Lack of self-motivation,' which has a mean score of 3.97. The second-most common issues with a mean score of 3.84 are 'Lack of engagement and interaction during lessons' and 'Expensive Internet services.' The third issue, 'Unclear and inconsistent learning structure,' has a mean score of 3.78. The fourth issue, 'Communication with lecturers is limited,' has a mean score of 3.75. The fifth issue with a mean score of 3.48 is 'I have poor Internet connection/Lack of Device.' Finally, 'Misunderstanding from parents' and 'Lack of technical skills' have a mean score of 3.30. The data showed that both the students and lecturers have to deal with issues and challenges of online learning. 'Lack of Motivation' has a significant high mean of 3.97 because most of those who stay home feel lethargic and do not have the motivation to work or study. They do not have companions or friends around them to provide the mental support they need to learn online.

Table 1: Descriptive Statistics for the Issues and Challenges During Online Learning

	N	Mean	Std. Deviation
I have poor Internet connection/Lack of Device	105	3.48	1.039
Unclear and inconsistent learning structure	105	3.78	.888
Lack of engagement and interaction during lessons	105	3.84	.942
Communication with lecturers is limited	105	3.75	1.026
Lack of motivation to learn	105	3.97	.882
Expensive Internet service	105	3.84	.900
Misunderstanding from parents	105	3.30	1.168
Lack of technical skills	105	3.30	1.084
Valid N (listwise)	105		

Experiences and Familiarity with the Advantages of Online Learning

Table 2 presents the research results, which show that most respondents agreed that 'I get flexible schedule and environment' is the most favourable factor in online learning, with a mean of 4.01 and a standard deviation of 0.700. During the current pandemic, home is the only place that provides a safe and comfortable environment for learning. Moreover, because the respondents do not have to spend time commuting to campus, they could prepare their schedule based on their personal preference and pace. Having a proper schedule and good time management helped the respondents to be more efficient and is the reason why most of the respondents prefer to have a flexible schedule and environment for online learning.

The second-most favoured factor when learning online, 'I can immediately look for information while having my online classes,' has a mean of 3.96 and a standard deviation of 0.587. Most respondents agreed they like being able to search for information while following an online class. Being able to obtain information immediately while following a lesson helps them to better understand the subject and provides them with additional resources. Searching for information on the Internet is more efficient than looking it up in printed books. A virtual meeting is the best way to interact with people during the COVID-19 pandemic without exposing everyone to the risk of contracting the virus. Even though this seems like a fun way to meet, in the long term it may affect an individual mentally since the virtual meeting takes away the intimacy and expression of personal conversation.

Table 2: Descriptive Statistics for the Advantages of Online Learning

	N	Mean	Std. Deviation
I can immediately look for information while following my online classes	105	3.96	.587
I have a flexible schedule and environment	105	4.01	.700
There are more resources available online	105	3.94	.732
It is a new and fun learning experience	105	3.56	1.073
Less costly	105	3.54	1.135
I get to interact with people virtually	105	3.23	1.187
Valid N (listwise)	105		

Respondent's perception of Online Learning

Figure 1 shows the respondent's perception of online learning. Forty per cent of respondents felt that it is 'Manageable and under control,' which indicates that the students and lecturers were able to cope with the sudden change in conducting lessons during the COVID-19 pandemic. However, 20% of respondents felt stressed, indicating the lessons without proper communication might occasionally cause stress and even mental breakdown because the students were not able to keep up with the lessons without proper physical communication and discussion. However, 17.14% of the respondents felt 'Nothing' about the switch to online learning. Figure 4.1 shows that 13.33% of respondents were excited about online learning, while 6.67% of respondents felt 'Insecure and lost' and 2.86% felt 'Tired and Annoyed' with online e-learning.
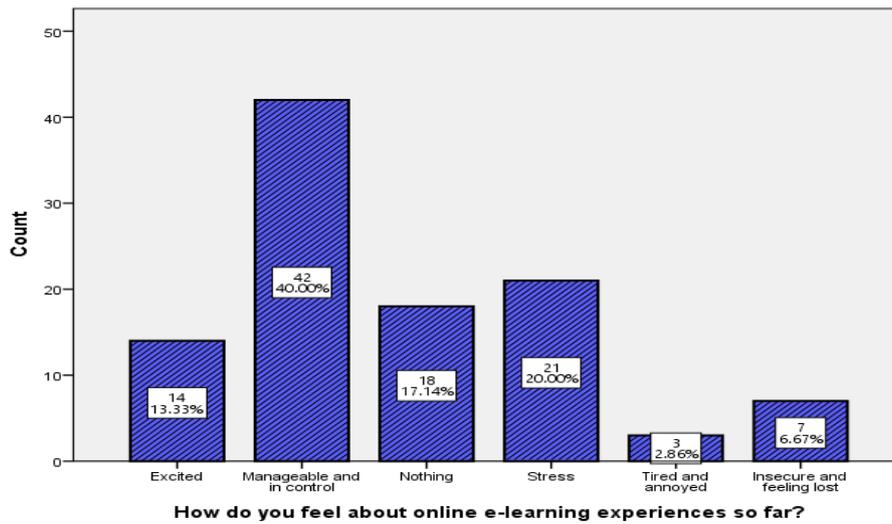

Figure 1: Respondent's perception of online learning

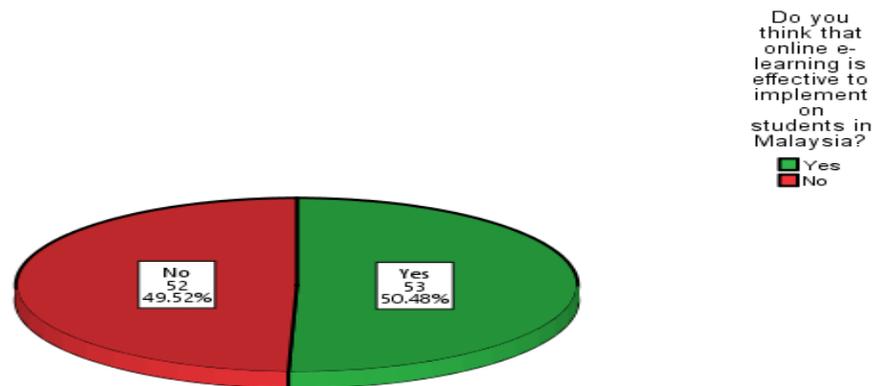### *The Effectiveness of Online Learning in Malaysia*

Figure 2: The Effectiveness of Online Learning in Malaysia

Figure 2 shows the pie chart for the respondent's perception of the effectiveness of online learning in Malaysia. There is a small difference in the respondent's opinion concerning online learning, where 53 (50.48%) of respondents believed that online learning is effective while 52 (49.52%) believed otherwise. Therefore, it is essential to resolve the issues and challenges of online learning for it to be an effective method of teaching and learning.

Strategies to Improve Online Learning

Table 3 shows the strategies that could be implemented to improve the respondent's online learning experience. The table shows that the most important factor in improving online learning is 'Clear instructions from the teacher/university.' The descriptive statistics show a high agreement of this factor with a *mean of 4.38* and a *standard deviation of 0.656*. The currently chaotic situation that resulted from the sudden switch from physical lessons to online learning shows that moving forward, the lecturers and universities must provide clear instructions and guidelines concerning the e-learning platform. For example, clear instructions on the technical skills required for online learning or guidance on the available academic resources would be of great help to the students and lecturers using the e-learning platform.

The second-most important strategy to improve online learning in Malaysia is a 'More active and interactive engagement (e.g., online activities, video session).' The descriptive statistics show a high agreement for this factor with a *mean of 4.32* and a *standard deviation of 0.753*.

Online learning sessions could be dull and monotonous due to the lack of physical interaction and one-way communication throughout the session. Some active and interactive engagement activities, such as mini-games or quizzes, would greatly improve the online learning experience and get the students excited and looking forward to the online learning sessions.

The third important strategy is having a 'Clear and consistent learning structure.' The descriptive statistics show a high agreement for this factor with a *mean of 4.31* and a *standard deviation of 0.725*. It is critical to have a clear and consistent learning structure because students have to understand the syllabus. Misinformation could happen in the e-learning platform; the announcement or information may not be conveyed to the students in an organised manner because of the utilisation of multiple platforms. Consistency is a critical factor in improving future online learning sessions.

Table 3: Descriptive Statistics for the Advantages of Online Learning

	N	Mean	Std. Deviation
Clear instructions from lecturers/university.	105	4.38	.656
More fun and engaging activities.	105	4.27	.737
Clear and consistent learning structure.	105	4.31	.725
More active and interactive engagement (e.g., online activities, video session).	105	4.32	.753
Internet access and technical devices.	105	4.27	.711
Guidance session on how to use required platform and apps.	105	4.23	.724
More online resources and courses available.	105	4.20	.726
Valid N (listwise)	105		

6. Conclusion and Recommendation

In summary, the e-learning platform is still new among Malaysian users. The sudden change and shift from physical lessons to e-learning platform when the COVID-19 pandemic hit Malaysia has greatly impacted all users. All students and lecturers were suddenly required to adopt online learning. The experiences of online learning during the past year should be used to develop strategies to make significant improvements and deal with the issues and challenges of the e-learning platform. Future investigations and research should be carried out to better understand online learning by interviewing the relevant parties involved in developing the e-learning platform to determine the best solutions for the current problems and challenges. The research should be expanded to include other parts of Malaysia and not confined to Klang Valley.

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