

ISSUES AND CHALLENGES OF ONLINE LEARNING DURING COVID-19

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Abstract: Coronavirus disease (COVID-19) is now a Global pandemic health problem whereas more than 200 million confirmed cases reported on August 2021 with more than 4 million deaths. Malaysia has recorded more than 1 million confirmed cases at mid of August 2021 with a total of 11,691 deaths. The new variants of this virus can infect humans in different ways and the effect varies according to the patient's antibodies or immunity system. The whole world is still in the process of controlling this virus from spreading by means of taking vaccine injections to increase the human immunity system. However, before this vaccine can be given to all, the best way to curb its transmission is by stay at home when there is no essential need to go out. Therefore, in ensuring that the chain of viruses can be terminated, educational institutions such as schools and universities are required to conduct online teaching and learning (T&L) sessions. This transformation of T&L methods brings various issues and challenges to the authorities, educational institutions, educators, students, and even to parents. The objective of this study is to look globally at the issues and challenges faced by those directly involved with online learning and what approaches can be taken to resolve those challenges.

Keyword: COVID-19 pandemic, issues, challenge, online learning

Introduction

The number of coronavirus diseases 2019 COVID-19 cases is increasing since its outbreak in December 2019. The first of COVID-19 was detected at Wuhan, Hubei province, China (Kang et al., 2020). The virus started to spread all over the world and classified as a public health crisis by World Health Organization (WHO). On 11th March 2020, WHO announced the COVID-19 had become a global pandemic and the number of infections has been increasing. On July 2020, more than 16 million confirmed cases has been reported and more than 600,000 death affecting 188 countries (Debbarma & Durai, 2021). As of 21st February 2021, there were more than 110 million confirmed cases worldwide with 2.457 million deaths affecting 192 countries ("Coronavirus COVID-19 (2019-nCoV)," n.d.). The most affected countries were the USA (28 million), India (10.9 million), Brazil (10 million), UK (4.1 million), Russia (4.1 million) and Malaysia (0.28 million). However, the recovery rate is greatly difference across the countries depending on the health intervention, successful planning and preparation and method for controlling the pandemic (Alanzi, 2021).

Owing to the spread of the virus, many industries are being affected with the lockdown being imposed and the workers are given a stringent quarantine. This lockdown has been eliminating the physical meeting between the workers and change the culture of people working in various sectors. The global social lifestyle has changed a lot because of the COVID-19 pandemic. Even though the geographic distance between different countries become smaller due to spread of COVID-19 virus, the distance between people should be increased to avoid the spread of the disease. Thus, many industries, educational institutions, shopping mall, open market and many other places have been closed because of the pandemic.

The long closing period of educational institution would affect the motivation and performance of the students. The teachers, lectures, and administration staffs also struggled to switch to online mode of teaching and learning. Most of the lectures were not ready to accept this situation. For instance, the

dental students faced the difficulties to take clinical skill training subject because they are required to close contact between the intern doctors and the patients (Chang et al., 2021).

The COVID-19 pandemic caused many educators and students to suddenly change their style of teaching and learning without prior preparation and instructions. The educators rushed to convert their platforms to an online environment or e-learning approach to reduce the close contact with the students. Since lockdown was enforced, there were no longer an option to implement the online learning at higher education institution, but a necessity (Maican, 2021). Thus, the educators and students must have good digital literacy skills to implement the online distance learning (ODL).

Motiwalla and Tello (2000), mentioned that online learning makes educators more creative to deliver the contents of their respective subjects without abandoning quality of the contents while meeting student demands for learning flexibility. These online learning can be conduct with two methods namely asynchronous and synchronous. Synchronous learning is two-way distance online learning that happen at the real time as in schedule with the educator and students. While asynchronous online learning occurs virtually online and through prepared resources, without real-time educator interaction such as video.

There are various video conferencing software and mobile applications available to perform the online learning process such as Zoom Meeting, Google Classroom, Google Meet, Skype, Cisco Webex Meeting, Go to Meeting and others. These kind of the systems and mobile applications are suitable to replace the face-to-face meeting in the classroom. The lectures such as problem-based learning (PBL) is easily conducted by using this kind of software and applications. However, the internship course or clinical skill training is still required students to expose to the people and close contact with supervisors or teachers. Hence, the current system and facilities are not capable to support the course like internship program and clinical skills training to avoid the spread of COVID-19 virus.

Currently, the typical methods of online T & L used likes blended learning (Sajid et al., 2016), (Kiviniemi, 2014), live teaching (Mian & Khan, 2020), virtual flipped classroom (Chick et al., 2020), online practice question, video conference, teleconference and telehealth (Ani et al., 2021).

The objectives of this paper were to review the issues and challenges of the most common online learning technique applied globally during the Covid -19 outbreak.

Literature Review

This section reviews the literature related to the issues and challenges in implementing online learning during the pandemic COVID-19 all over the world. Previously, the implementation of the ODL is not compulsory to the educators and considered as added value in teaching and learning process. After the COVID-19 outbreak, the online learning had been implemented in T & L process to break the chain COVID-19 transmission. There have been numerous studies on the literature of user's acceptance of the online learning. A study by (Effendy et al., 2021) specify the factors that influence student's acceptance of online learning. The Technology Acceptance Model (TAM) and Information System Success Model were combined to test the intention, user satisfaction, and actual use of online learning. The results indicated that the factors influence the online learning user satisfaction was influenced by the quality of education, service quality, and information quality (Effendy et al., 2021).

As mentioned before, there are various tools used for online learning process such as Google Classroom, WhatsApp, Zoom, Cisco Webex Meeting, and Google Meet. The combination of various tools can increase the efficiency of the online learning process. However, to perform the best T & L process, one of the main issues is the cost of internet usage become as a challenge to the students and instructors. The implementation of distance learning is highly dependent on the tools, supporting infrastructures and implementation strategies (Utomo et al., 2020). Most of the countries all over the world classified the online T & L during the COVID-19 outbreaks as an emergency online learning due to the lack of preparation for students and educational provider in facing this pandemic situation. The

students were struggled to follow the online class given by the teacher or instructors because of the various issues such as inconducive workstation at home, low internet coverage, limited numbers of devices for online class and cost of internet data. Besides, the internet coverage also different between the urban and rural area cause the student from the rural area were suffered to follow the online class compared to the student in urban areas.

The ability of the instructors to deliver their online T & L also become the main issues discussed among the educational providers. The senior teachers or instructors were difficult to embark on the online system due to lack of experience in using the digital equipment and latest mobile applications. However, the transformation process is still ongoing to adapt the online system in T & L delivery process. In South Korea, three categories of remote T & L were implemented which are synchronous or real-time interaction, asynchronous or content- based online class and assignment-based online class with the guidance from the Korean Ministry of Education(Cha & So, 2021). All the students were ensured to have equal access to all learning platforms. Like Malaysia, whereby the government took the full authority to produce the new policies and standard operating procedures (SOP) in public and private education institutions.

Methodology

This study is driven by a review question: “What are the issues and challenges being in online learning during pandemic COVID-19 outbreak?”. The academic literature was searched in the source of data in ScienceDirect (see Figure 1). The ScienceDirect was selected because of the index publications in a various discipline of study. In addition, ScienceDirect is one of the popular scholarly databases. The search string used to find the article was “issues and challenge of online learning during COVID-19” AND “pandemic”. The searched result the filtered by limiting the publication date to 2020, which is the start of the pandemic. After further filtering process, resulting 66 articles remain in final stage of reviewing process. As an inclusion criterion, the article discussed about the issue and challenges in online learning all over the world were selected. Meanwhile as exclusion, the articles were not discussed on issue and challenge in online learning were rejected.

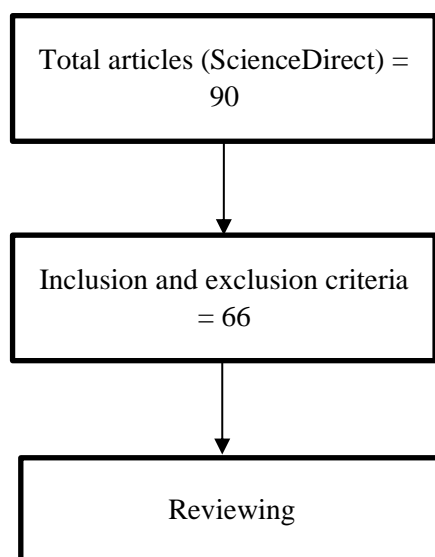


Figure 1: The literature search result

Result and Discussion

This section describes the issues and challenge faced by the student and educators during the pandemic COVID-19 outbreak.

According to the (N. Ismail et.al, 2020), the main challenges of online learning during pandemic COVID-19 were classified into eight (8) categories such as internet problems, technical problems, lack of learning materials, worries on online learning, lack of information technology (IT) skills, family

problems, health issues and non-conducive environments. (Ismail et al., 2020), has been conducted a study at higher learning institution in east of Malaysia, found other than the above factors, most of the students were not ready to continue their study through online due to the issues of low internet access.

The study also has been done by (Alamer et al.,2021) to 4th year medical students in Turkey and they encountered that the technical difficulties is the main issues faced by the students during the online teaching session. However, during the online teaching or synchronous session the student's attendance was high, reaching to 100% because most of the students were prefer distance learning rather than conventional learning. In terms of students participating into the online class, there is no issues because the students easily join the class if they have a good internet access. However, the efficiency of the online class is highly depend on the good support infrastructures including the internet connectivity.

Meanwhile (C.Foo et.al,2021) has been conducted a study to investigate the performance of the students using online distance learning through comparison of between problem based learning (PBL) tutorial and conventional method of PBL tutorial. The study was done at a single academic institution in Hong Kong, China. The finding of this study indicated that the performance of the student using the distance learning PBL is lower compared to the student participating PBL tutorial conventionally. Hence, it can be concluded that the issues on the quality of the teaching and learning delivery is necessarily needed to improve.

S. Al-halalmeh (2021), also highlighted that the most required skill during the pandemic are the cognitive, emotional, and humanitarian skills, professional and ethical skills, technical and electronic skills. Indirectly, these are the challenges to academic staff that critically needed to enhance the teaching and learning process during the pandemic COVID-19. In addition, the counsellor also needs to enhance their IT skill due to the shift from face-to-face learning to the distance learning. The role of counsellor is important to ensure that the mental healthiness of academic staff and students are under controlled. The teacher or academic staff also required to master in various platform that they were never used before. The time allocate to explore the new teaching and learning platform were increase the level of stress among the academic staff. Hence, the acceptance of the various digital platform in teaching and learning is still become the issues and challenge among the academic staff and the students (Toto et al., 2021).

While (Zhoa et al.,2021) is trying to relate the physical learning environment, student's physical and mental health under COVID-19 to the learning satisfaction in their study. The result of the study indicate that the learning satisfaction have no direct impact to the physical exercise condition and noise in the physical environment during the distance learning at home, but the good environment have a significant impact on learning satisfaction. Thus, it is a challenge to the educators to ensure the students satisfy with the online teaching and learning process.

In the other perspectives, the educators will be facing some disadvantages of online learning such as no self-discipline, no face to face interaction, lack of input from lecturers or educators, good online learning is difficult to do, no facilities to support online learning and hard to resolve the difficulties(Salleh et al., 2020).

Moreover, according to the (Joko et al.,2020), there are three (3) categories of the supporting factor that contributed to the effectiveness of online learning and preventing the spread of COVID-19 virus :

- 1) Very supportive factors: teaching and learning materials, evaluation and time duration; ownership and adequate e-learning support tools; the ability to access information and online materials, use collaborative software to work together, discipline to apply the COVID-9 protocol;
- 2) Supporting factors: learning platform, e-learning content compatible with mobile, ability to communicate via email and WhatsApp, the ability to learn in a relaxed manner and smooth internet;
- 3) Sufficiently supportive factors: the ability to plan and uses time wisely.

A recent study indicated that the readiness of educators and student in online education is crucial to ensure that the integrity is properly applied in T & L process. This has been extensively discussed among the researchers regarding to the cheating practice during the online examination. The integrity among the students and educators is significant in online T & L process. Meanwhile, the continual quality improvement must be implemented in order to provide better educators by provide a suitable training to prepare them to facing the challenging of pandemic Covid 19 effect (Ani et al., 2021).The

intensive training requirement become a new demanding among the educators in order to provide them with the new knowledge and skills to deliver the online teaching and learning process. Currently, a lot of online courses offered for educators to improve them in teaching and learning, but the issues is about the cost of the training. Some offer a free course but only involve the beginner level and if educators wish to continue the course at the next level, fees will be charged based on the appointment hours. Thus, the educators must have the financial support from their employer to cover the cost of training.

Based on study by Ilias et al. (2020), there are seven challenges that might limit student's intention to use online learning. The challenge outlined are the assessment, communication issues, technical issues, issues on internet connection and insufficient data capacity, lack of student's motivation, preferences, intention, and student's level of understanding about the online learning. However, to overcome this issue, they suggested several strategies such as improving the online learning method by implementing the flipped classroom and learning management system (LMS), support from universities and government in terms of electronic devices and internet data and provide the licensed online learning platforms such as Microsoft Team, Google Meet and Zoom to the students.

Conclusion

Since the spread of COVID-19 and the stringent of physical movement, the educational institutions have taken the great measures through digital means to ensure the student can continue the study effectively. The physical contact is not allowed for students and academic staffs to break the chain of COVID-19 transmission. Thus, they need to adapt the new norm during this pandemic situation. The challenges also faced by the students to continue the online learning as they come from the different socioeconomic background.

Based on aforementioned discussion, the issues and challenges in online learning especially in the context of pandemic COVID-19 can be classified into separated cluster namely infrastructure and internet connectivity challenges, the competency of the educators in online learning, the students' and staffs' acceptance toward the implementation of online learning, self-discipline among the students against the online learning and the readiness of academic staff to deliver the teaching and learning through online platforms.

All the issues, challenges and obstacles faced by educators and students in ensuring that the teaching and learning process can run smoothly should be addressed with carefully planned strategies. All parties involved such as the government, educational institutions, teachers, students, parents, and the industry need to work together to face and resolve these issues. Without the cooperation of all parties involved, it is unlikely that the issues and challenges faced can be resolved effectively.

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Conflict of interests

The authors have no conflict of interest to declare. All co-authors have seen and agree with the contents of the manuscript and there is no financial interest to report. We certified that the submission is original work and is not under review at any other publication.

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