



TEACHING AND LEARNING CHALLENGES IN THE PANDEMIC ERA OF COVID-19

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Abstract:

COVID-19 pandemic has driven the education system to shift from face-to-face learning to a home learning system through online learning. This sudden change has worried teachers, parents and students all over the world. Various studies have been done to study the implementation of online learning, however, there are a little number of studies among school teachers, especially in Malaysia. Thus, this study aimed to explore teachers' perspectives on the challenges of home learning and their commendations. A qualitative study was conducted through online interview sessions among 20 teachers in Seremban District, Negeri Sembilan from October 2020 until February 2021. Researchers verified the data by repeatedly listening to the audio recording, and transcriptions, reading and re-reading the transcripts. It will be coded into themes and subthemes based on the similarities of the content to assess the challenges and recommendations of online learning. Most of the respondents agreed that the adaptability to change to online learning, infrastructural such as the internet and corporation from students and parents is the challenges faced during learning from home. More interactive methods were suggested in ensuring effective online learning which will further motivate students to

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be engaged in learning from home. These strategies can be adopted for future sessions to ensure every student is able to gain equal education in any situation.

Keywords: home learning; COVID-19; teachers; challenges

1. Introduction

The unexpected series of a disruptive pandemic known as COVID-19 has placed unprecedented stress on the education system. The situation has become even worse with the closure of schools and institutions all over the world. These nationwide closures have impacted hundreds of millions of students (UNESCO). In Malaysia, the enforcement of the Movement Control Order (MCO) has affected the closure of all kindergartens, public and private schools, and all public and private institutions of higher learning (Prime Minister's Office, 2020).

Consequently, some universities and boarding schools instructed their students to vacate their hostel rooms and return to their respective homes. This affected millions of school students, higher institution students and also international students (Rahman, 2020). However, to tackle COVID-19 and guarantee the well-being of teachers and students, these are the only measures to stop the spreading of the infection. The consequences of this pandemic led to the announcement by the Ministry of Education for the implementation of online teaching and learning. The extended closures of schools and institutions carry an impact on people across communities including teachers and students. The reality is quite different between daily school routines and e-learning.

Home learning is an alternative way for continuous education; thus e-learning has been enforced. A few challenges have been reported regarding the implementation of e-learning. It is difficult to guarantee that students have an access to e-learning. Low internet connection and lack of necessary facilities and amenities, such as high-speed internet connections (Panyajamorn et al., 2018) are among the common challenges faced. Students who reside in rural areas are facing challenges in receiving good internet access (Victoria et al., 2018; Valk et al., 2010; Bell et al., 2008), compared to students in urban areas, thus causing disparities in obtaining equal learning (Sanchez-Gordon & Lujan-Mora, 2014).

To sum up, e-learning poses a number of challenges for the learners; however, there might be a way to overcome these challenges. Thus, this study was conducted among teachers to explore their perspectives on the challenges of e-learning and their recommendations to overcome the challenges. This study may provide solutions and ideas for the teachers, parents and students to have an effective and interesting way of learning during home learning sessions.

2. Methodology

2.1 Recruitment of respondents

This qualitative study was conducted among teachers at randomly selected primary and secondary schools around the Seremban District, Negeri Sembilan. A total of 20 respondents were selected using the purposive sampling method (Yusof et al., 2011). Potential respondents were approached through email and contact numbers were retrieved after the discussion and approval from the headmaster or principal of the selected schools. The respondents were approached through email or phone calls. Interview sessions were set and conducted through Google Meet to abide by the standard operating procedures (SOP) of COVID-19. Teachers with higher management posts such as headmaster or principal were excluded from the sampling frame in order to have a better view of managing the new norm-setting of the education system.

2.2 Ethical consideration

Permission was obtained from the Institutional Review Board with the registration number (KPJUC/RMC/SOHS/EC/2020/314), the State Education Department of Negeri Sembilan and the Ministry of Education Malaysia. The respondents consented verbally to participate prior to any data collection.

2.3 Data collection

A self-develop structured interview script was used to get the views of the respondents regarding the new norm in the education system. The questions were developed based on information drawn from previous literature and guidelines in the Malay language (Basilaia & Kvavadze, 2020; Anwar and Adnan, 2020), then translated into English which was validated by an expert. The questions were designed to obtain information on knowledge of COVID-19, challenges and perception of COVID-19, attitudes, and acceptance of COVID-19. Prior to the interview, each respondent was given clear explanations of the study and informed of their rights. Respondents are assured that all information would remain confidential.

2.4 Data analysis

The narrative data were organised into themes and sub-themes. The inductive content analysis began with data familiarisation by repeatedly listening to the audio recording, transcription, reading and re-reading the transcript (Neegaard et al., 2009). The data were coded and discussion occurred between all researchers to refine the codes. Preliminary codes were grouped into themes and subthemes based on the similarities of the content. The discussion led to agreement on the themes that were reflective of the challenges of e-learning.

3. Results and Discussion

The rapid pivot to e-learning due to COVID-19 has caused disproportionate effects on the education system including teachers and students. In Malaysia, the application of e-learning in education has been normalized among educators and students in higher education institutions. Compared to schools, the students and teachers faced a lack of resources which has become a barrier in e-learning.

There is a need for teachers to be reflective, innovative and adaptive to the changes (Badiozaman & Leong, 2020) as there are types of modules that simply cannot be taught via e-learning. In this study, there are many challenges faced by teachers, students, and parents. The challenges in this area can be divided into educational environment challenges and infrastructural challenges.

3.1 Educational environment challenges

3.1.1. Coping skills

E-learning is a new norm for school teachers and students. The new environment and role change require the consolidation of adaptive skills from all involved. In the COVID-19 situation, teachers need to master online applications for teaching and learning. However, this has become one of the barriers to e-learning as not all teachers and students are ready for this change.

“For this new norm, it is quite hard for us to accept because it is hard for us as teachers and also students. A commitment is needed. Sometimes we need to comfort and motivate the students throughout the e-learning process.” (Respondent 10)

“Compared to face-to-face learning, we cannot see our work directly. Thus, this is causing difficulties to us.” (Respondent 12)

“Actually, I am one of those people who prefer conventional learning because the information delivered to students is more effective compared to e-learning. Furthermore, we were all so tired in trying to understand online learning.” (Respondent 13)

“My subject requires a lot of hands-on experience; thus, it is difficult for students to do the projects. My subject involves a lot of drawing and thinking. Although students can refer to the online video, it is not the same as conventional learning, plus some won't watch the video.” (Respondent 18)

Learners all around the world have changed to e-learning in the midst of the COVID-19 pandemic. Thus, the methods of learning have to be compliant with the current condition. Teachers are like designers and tutors at the same time in order to design worthwhile activities for students (Rapanta et al., 2020). However, the teachers and learners in Malaysia were not completely ready for the shift, especially school teachers and students. A study by Coman et al. (2020) found that this sudden shift to

online learning was a challenge as the institutions, teachers and students were not prepared for it. Teachers found it difficult to adapt to a new teaching style in a short time without proper interaction with students and also on technical skills. Meanwhile, the students encountered a lack of adapting to the teaching style of online learning which caused them to have difficulties understanding the subjects taught during the sessions and loss of focus during the class (Coman et al., 2020).

3.1.2. Inadequate response and cooperation

Entering the online learning era means that the teachers, students and parents need to adapt to the new skills and role changes during this learning period. The students' and parents' cooperation and preparations are necessary for e-learning. However, in this study, most of the respondents have difficulties in gaining full cooperation and response from students and parents during e-learning. For instance:

"The challenges are when we give homework to them. The feedbacks are very late and we have some problems when they need to wait for parents to come back home at night after work to submit the homework. So, the number of homework submitted is lower." (Respondent 5)

"Since MCO has started, some parents still have to work at the office and some work from home. The biggest problem was with those parents that are working in the office, where the homework we gave in the morning may reach the kids only at night after the parents come back home. So, only half of my students are getting feedback and information from me." (Respondent 6)

"Some of students and parents are unable to cope to this new way of learning. The environments in a home are very distracting." (Respondent 16)

"We actually give out schedule for the student and ask help from the parents to provide a worksheet to the children, but they couldn't actually cope with our schedule. So out of 8 students, only 2 students committed to the schedule." (Respondent 15)

"When we are teaching them, most of them are not focused during class." (Respondent 17)

"The biggest problem is low support and cooperation from the parents. The teachers require the help from parents in teaching their children due to this COVID-19 but some did not teach as they did not know how to." (Respondent 19)

Implementing e-learning has changed the education system so the support from students and parents is vital for effective e-learning. Support from parents contributes to the quality of their children's learning (Rasmitadila et al., 2020). Many children needed extra support to manage remote learning, regardless of age and capabilities (Koskela et

al., 2020). However, in this study, the respondents acknowledged that the majority of parents are working thus they are unable to give much attention to the learning process of their children. Lack of motivation among the students to continue their online learning is due to a lack of motivation and support from their parents (Mahad et al., 2021) as they are more focused on their work (Zamri & Anita, 2020). Koskela et al. (2020) found that some children were not ready to study alone without parents and need more support. Based on the study among parents, they agreed that they lack training and support to help their children during online learning and moreover, insufficient investment and maintenance in technical aspects have become barriers to providing good online learning surrounding for their children (Abuhammad, 2020). This point led to disruption of the e-learning plan made by teachers and inequalities of lessons learnt by the students.

3.1.3. Psychological challenges

For children, the closure of school means that there will be a lack of access to resources in schools. With the MCO enforced, the children are unable to have fun outside, thus they have been locked up inside the house for too long. This may cause the children to develop depression and stress to adjusting to the new norm. Furthermore, online learning is quite a new thing for school students. Thus, some of them have difficulty adapting to this new norm. Teachers are also not excluded from this. In this study, the respondents have developed more stress than during conventional learning.

"We have done our own research and found out that about 90% of the students are affected by this new normal education system. It ended up giving a huge effect to students where they feel stressed with homework and unable to submit to the teachers due to parents coming home late at night. We as teachers also feel very depressed and stressed." (Respondent 14)

"I can accept this new normal but sometimes, we feel stressed about it. Even my child is having online classes and really need support from the family. The examinations are also delayed, causing the students to lose their spirits in doing the examination." (Respondent 18)

"The students do feel a bit stressed in understanding the subject due to teacher cramming the contents in one day. However, when they are messaging us for explanation, we answer their questions immediately and explain until they understand. Furthermore, students are usually alone at home and cannot meet their friends. This led to stress which affect boredom and emotional burden." (Respondent 19)

"This new norm of e-learning makes me need to learn how to use Google Classroom and also DELIMA which is more stressful for me. I also need to learn how to do marking online. Students are also more prone to be more demotivated with online classes." (Respondent 20)

3.2 Infrastructural challenges

3.2.1. Availability of e-learning medium

After the implementation of MCO, the government has decided to continue education through e-learning. Thus, electronic gadgets are a must for e-learning. However, in Malaysia, not every household is able to have enough computers, laptops or mobile phones for their children. There are also cases where only parents have the gadgets, thus the children are unable to learn during the day. Thus, they are unable to receive and perform the tasks according to the scheduled timeline.

"E-learning is quite hard because of the lack of internet connection." (Respondent 1)

"We have struggled during online class in the technology aspect. Not all students have all these gadgets and Internet connection." (Respondent 14)

"Not all of us have gadgets such as laptops. So, what we can do to help the students is by preparing the worksheets or homework and leave them at schools for pick-up." (Respondent 15)

"Only 10% of students in my class have their own gadgets while the rest still rely on their parents' smartphones. So, what we can do to help is by preparing learning modules and parents come to school to pick up these modules." (Respondent 17)

3.2.2. Cost-efficiency

Some families especially with a large number of children have difficulties in providing laptops or smartphones to their children. Especially during MCO, many people are affected by some problems in their work, and loss of work and some of them faced a reduction in wages. Thus, they will put priority on basic daily needs. Some of the respondents acknowledged the barriers faced by the students.

"Even though I live in a city area, not all of us can afford to buy smartphones. It is also a problem for those that have many siblings. Most of my students come from family background with low wages and income, thus they are unable to have a good Internet connection." (Respondent 17)

"My students have financial problems. So, they have difficulties in having enough prepaid and data. They are unable to attend online classes." (Respondent 18)

"Some of the parents lost their source of income during this MCO. So, what we as teachers can do is help the student to have access for online learning especially the students that are going to face big examinations." (Respondent 20)

By its nature, e-learning depends entirely on technology and the internet, so it is undeniable that they play a major role in effective e-learning and have become some of

the challenges faced by the respondents in this study. The respondents found that not all parents have laptops or computers and good internet connections, especially among low-income families. When this problem arises, students are unable to follow the lessons effectively. Online learning becomes less effective due to socio-economic factors of their family (Brilliannur Dwi et al., 2020). This is in agreement with the study by Chea et al. (2020), where the respondents from low-socio-economic families could not afford a stable Internet connection and computers or laptops, thus they are using smartphones for learning sessions. Teachers in a study by Rasmitadila et al. (2020) also agreed that their students have difficulties in lack of equipment and Internet connection, thus faced difficulties during online learning. Recent literature reveals that the students have unequal learning opportunities as a result of discrimination against better family facilities (Jaeger & Blaabaek, 2020). In addition, the current condition of the COVID-19 pandemic makes the parents prioritise essential daily needs than equipment for online learning (Buja et al., 2020).

As mentioned in a study by Mishra *et al.* (2020), this e-learning is a new normal that requires a learning process from both teachers and students, thus it is a challenging task to perform. Apart from that, the learners were affected psychologically due to the implementation of e-learning. The results of this study have indicated that the sudden shift to e-learning methods have rendered the students dissatisfied with the new learning system and stressful condition. Coping with online mode might become a challenge as this includes the ability to deal with technology, sufficient home resources facilitating online learning or a stable internet connection (Sahu, 2020). In a report by Favale et al. (2020), students feel stressed in accessing the online platforms due to the high load of traffic and thus contributing to more stressors for them. Furthermore, lack of communication between friends contributes to this problem. This is in agreement with a previous study which found that lack of interpersonal communication contributed to this psychological response (Xiao, 2020).

3.3 Strategies for effective e-learning

Even though the adoption of e-learning has become a viable alternative way for continuous education, the challenges faced by the learners cannot be denied. With the findings from previous studies (Dhawan, 2020; Mukhtar et al., 2020, Qureshi et al., 2012, Bali & Liu, 2018), the findings in this study strengthened the feedback on technology accessibility and adaptability of e-learning. There is currently no sign that this pandemic will end soon as the number of positive cases still keeps on increasing. Furthermore, clusters involving education centres are on the rise (Babulal & Solhi, 2021). To date, many schools have been ordered to close following the detection of COVID-19 infection (Menon, 2021; Krishnan, 2021), thus the improvement of the e-learning method should be done. The use of varied instructional methods will encourage more enthusiastic participation in online learning (Rasmitadila et al., 2020).

In this study, the respondents believed that teaching materials should be adapted to the conditions of the students. As stated by the respondents, there are students that have difficulties in e-learning due to a lack of gadgets and poor Internet connections.

Some of the students need to wait for their parents to borrow their smartphones. Thus, the respondents have made more effort in preparing the modules for the students. This is in agreement with the study by Mpungose (2020), where the respondents can depend on the hard copy of the module outline as an alternative pathway in case, they have no Internet access.

“For students that have problems with gadgets or Internet connection, we provide the module and the parents will come to pick them up.” (Respondent 16)

“To overcome the poor Internet connection, we provide a module to students, so the parents can come to pick up the module.” (Respondent 17)

There are also respondents who used video-recording as a medium of e-learning. The video will be shared a day before the class for students to watch and learn. This video also made it easier for students to re-watch for revisions. Video lectures provide various features designed to supplement content delivered through various forms of both auditory and visual media (Alraimi et al., 2015; Breslow et al., 2013). This method is also implemented by the teachers in Indonesia as they think this is one of the most accessible media to improve students’ understanding (Rasmitadila et al., 2020).

“For me, I will share a video to watch before the class started. So, they can learn by themselves or with friends before the class started. Then, during the class, they may ask for any questions they did not understand.” (Respondent 8)

“Usually, we provide online recording for students to watch. From this, it is easier for them to review back on the learned topic as they may not fully understand during online class.” (Respondent 10)

A mentoring method is also preferred by some respondents. The mentoring method is like a group discussion between students where one of the students will teach their friends, thus they will be assigned one student as the mentor. From this, the teacher may detect whether the students are able to understand the modules. The mentoring process involves a mentor who will help in teaching, coaching and counseling with advice to their protégé (Yaw, 2007). Online peer-to-peer mentoring has been acknowledged as a way to improve the outcomes of online education and it strongly affected students’ behavior and well-being during the online learning period (Hardt et al., 2020).

“For me, I will reduce the number of students in my online class. I will also practice the mentoring method, where I will appoint one student to teach their friends before class. So, during class, they may ask the questions which they do not understand.” (Respondent 3)

Most of the respondents suggested the Q&A method through an online quiz using many online applications available such as Quizzes, Kahoot, and others. Online quizzes or activities that have been used by the respondents are well received by the students and they have fun with them. With these applications, the response from students is more active. Furthermore, this method is an easy way for teachers to measure the students' understanding of the subject (Rasmitadila *et al.*, 2020).

"For me, there are a lot of things we can do and learn such as do an online quiz and activities." (Respondent 1)

"For interactive Q&A, we have Myquiz. The feedbacks from students are good, so we had prepared more interactive games online." (Respondent 16)

"I try to learn and use Google Classroom and use interactive learning such as quizlet, livebook and word wall. This receives good feedback from the students." (Respondent 18)

Thus, for effective e-learning implementation in the future, these factors and ideas should be considered.

4. Conclusion

Home learning during COVID-19 is a new learning system applied in Malaysia since the outbreak of the COVID-19 pandemic. In response to this, e-learning has been implemented with various methods for dealing with changes in the learning system. In Malaysia, the exposure to e-learning began in the 1990s with more focus on higher education institutions through the Learning Management System (LMS) (Hussin *et al.*, 2009; Embi, 2011). However, this exposure is a new experience for school students, especially in primary education institutions (Mahad *et al.*, 2021). According to the findings of this study, it can be concluded that home learning is not an easy education system. The teachers and learners face numerous challenges, especially in terms of equipment and Internet connection. Furthermore, school students mostly depend on parents to access online learning platforms. Thus, the support from parents in terms of motivation and online learning necessity are the most important factors for effective online learning. Online learning is in itself a challenge for the teachers during this pandemic. Thus, teachers need to improve their skills and methods of teaching. To ensure the students are in a positive mood, teachers need to be creative to improve the students' motivation.

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Conflict of Interest Statement

The authors declare no conflict of interest.

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