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COVID-19 Pandemic and Online Distance Learning (ODL) Issues among Malaysian Secondary School Teachers

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Abstract

The implementation of the Movement Control Order (MCO), which has been in effect since 18 March 2020 to date, is a preventive action implemented by the federal government of Malaysia in response to the COVID-19 pandemic. The purpose of the MCO is to break the chain of transmission with the aim of levelling the rate of infection. In complying with this measure, Malaysian schools are also taking the effort to continue their learning activities by implementing the online distance learning (ODL) approach, which requires educators to conduct their teaching and learning activities via online methods from home. The variety of online platforms used in the ODL approach that include WhatsApp, Telegram, Google Meet, Hangout, and Google Classroom, can cater to the needs of students. E-learning has been introduced to facilitate the traditional teaching-learning processes, and it encompasses the use of electronic devices such as computers, mobile phones, or tablets to provide online learning materials. In addition, the ability of the learners, their computer competency and experience, and their attitudes toward technologies are among the significant factors found in previous studies related to the adoption of educational technology. The purpose of this study was to investigate the challenges and issues faced by secondary school teachers in Malaysia while using ODL. The study employed qualitative approaches. Primary data were collected using an interview protocol through an in-depth interview by using Zoom Meeting and phone calls. Informants' opinions and answers were analysed using thematic analysis, whereas themes were created and used based on the informants' answers to analyse and present the findings. The results showed that secondary school teachers faced several challenges in the implementation of ODL.

Keywords: Online Distance Learning, Urban Area, Rural Area, School Students, Educational Obstacles, Secondary School Teachers, ODL

Introduction

The COVID-19 pandemic has impacted educational systems in 186 countries, and 1.2 billion children have been severely impacted by school closures (Boon, 2020). In Malaysia, schools were shut down for six months in the second quarter of 2020. After nationwide reopening, they faced closures again in May 2021 (Hazlin, 2021).

The global closure of educational facilities by the COVID-19 pandemic resulted in 1.5 billion students being stripped of the opportunity to receive regular education (World Health Organization (WHO), 2020; United Nations, 2021). In Malaysia, 1,805,706 public secondary school students and 149,707 teachers switched from face-to-face physical interaction in the classroom to online learning during the enforcement of the Movement Control Order (MCO) on March 18, 2020 (Ministry of Education, 2020a).

Consequently, all Malaysian academic institutions were forced to transition from face-to-face to online instruction. However, due to a lack of lesson preparation, teachers faced a variety of remarkable challenges, the most common of which include signal problems, data expansion, handling technological platforms, and receiving feedback from students, among others (Hazlin, 2021).

Science and innovation are rapidly advancing, particularly in the field of technology. The dynamics of modern technology are accelerating at breakneck speed. The academic structure has now established that most learning lessons are inextricably linked to technological activities. Technological innovations aid the educational process in some ways. Furthermore, online media has evolved into a platform for knowledge and can be used as a source of education (Nugroho, 2020). As a result, educational resources may now be obtained, which do not just come from lectures or teachers, but also from the web platform. The use of online platforms as educational tools can be considered a good way to develop global information without being constrained by time or geography (Nugroho, 2020).

Educational activities involve the transformation of communication in the framework of a learning instrument from educational resources to pupils. Educators are educational resources in the learning activity, and the messages being delivered are instructional materials collected by the message receiver, such as pupils. The meaning received during the learning process to transmit the teacher's message to the students must be appropriately obtained to alter their comprehension and stimulate changes in their attitude (Romero & Ventura, 2020). As a result, the success of learning activities is contingent on the quality of the communication process that takes place during the class.

Research Aims

The COVID-19 pandemic is considered as one of the most devastating health crises in the 21st century. Educational institutions globally faced closures that interrupted the flow of educational activities. In response to such changes, Online Distance Learning (ODL) has grown in popularity and is seen as an alternative method in higher educational settings (Wong et al., 2021).

Adapting to this new normal, Malaysian primary and secondary schools continued their teaching and learning activities using ODL approach starting on 13 April 2020 until now (Karuppanan, 2021). This research was conducted to explore and examine the issues faced by secondary school teachers when conducting ODL in secondary schools, by considering the perspective of ODL interaction, motivation, students' performance, and ICT, and technology support system. This is due to the concern that going digital effectively requires substantial coordination by management and support from ICT service providers.

Thus, to develop ODL effectively, teachers need to be prepared to employ effective ODL approaches as well as robust curriculum pedagogical methods. Educators, especially secondary school teachers must know the student's condition, such as their motivation and ability to have stable internet connection to allow them to easily access lessons and to interact with educators via ODL (Karuppanan, 2021). Moreover, this research also sought to discover the problems and issues that are currently faced by teachers, parents, and students.

Online learning can be boring for certain students. Long hours spending time in front of a computer screen could cause a student to skip some lessons. Thus, the challenge for teachers is to plan for an effective online class, an obstacle made more difficult to address as there are students who still cannot afford internet data plans or smartphones to participate in the online discussion forums (Alim et.al., 2019).

Teachers were experiencing some difficulties to impart knowledge through an online platform, particularly at the beginning of the pandemic (Etxebarria et.al, 2021). However, secondary school teachers in Malaysian government schools face several difficulties when conducting online research (Gautam, 2020). The issues they encountered include time consumption, miscommunication, student-teacher interactions, student involvement, and obtaining student feedback. These challenges affected both the educational system and students' motivation in learning, which subsequently impacted upon their learning process (Gautam, 2020).

High rate of student dropouts is one of the most dire consequence. The government, in particular the Malaysian Education Ministry (KPM) must be proactive to tackle this issue. Children, especially in grades 1, 2, and 3 found it difficult to concentrate in an online classroom, citing reasons such as having difficulty concentrating in front of the computer screen throughout the learning session (Aliyyah et al, 2020). Most of the classes do not allow students to chat with their classmates, even though talking to one another can help students develop social skills, communication, and critical thinking skills. As a result, students become easily bored as they are unable to immerse themselves in the classroom atmosphere or participate in extracurricular activities such as clubs or sports .

Parents, on the other hand, must ensure that their children enroll in the online classes at the appropriate time, and study the subjects assigned by the school. Parents also must ensure the learning process is free from interruption (Ahmad et al,2019). In addition, they must assist their children in completing school projects or exercises and ensure all the classes do not overlap with one another.

In addition, a shortage of devices or inadequate internet connection might also prevent instructors, parents, and students from participating in the "*Teaching and Learning at Home (PdPR)*" sessions (Abdul Rahman, 2021). Research conducted by the Khazanah Research Institute (KRI) entitled "Covid-19 and Unequal Learning" found that 37 percent of students do not have a laptop or tablet for PdPR whereas only six to nine percent of students owned a laptop. The PdPR implementation was therefore hampered by insufficient equipment and an unreliable internet connection. This in turn influenced the teacher's ability to teach and

affected the student's learning ability. Disruption of the delivery and receiving processes also impaired the growth of knowledge (Abdul Rahman, 2021).

When discussing online learning at the primary level, an article entitled "The Perceptions of Primary School Teachers of Online Learning during the COVID-19 Pandemic Period: A Case Study in Indonesia" found that teachers should design their own learning frameworks while considering the economic background of the students. There are certain positive points when it comes to designing custom-made teaching materials. The teachers should understand, know their students, and provide flexibility to students to learn at their own comfort level (Aliyyah et al., 2020).

Additionally, the current debate centres on whether online education will endure after the COVID-19 pandemic and how such a change would affect the global education market (New Straits Times, 2021). Over the past year, students' attitudes have undergone a significant shift. According to a recent global student survey by Chegg.org, 78% of Malaysian tertiary students prefer online learning over traditional face-to-face classes if it means lower costs (New Straits Times, 2021). Data from other countries also show similar trends for instance, 83% of Canadians and 78% of Chinese students prefer online education, respectively (New Straits Times, 2021). There is proof that online education can be more efficient. When learning online, students typically retain 25 to 60% more information compared to the 8 to 10% obtained in a traditional classroom setting (New Straits Times, 2021). In general, learning through e-learning takes 40 to 60% less time than learning in a traditional classroom (New Straits Times, 2021).

Reliable Internet access is a requirement for digital access, the lack of which presents a challenge (New Straits Times, 2021). A digital gap was primarily observed between countries and between income brackets within countries in the Organization for Economic Co-operation and Development. In 2021, a student in the interior of the East Malaysian state of Sabah gained nationwide coverage for climbing a tree just so she can access the Internet to take an online test (New Straits Times, 2021). Furthermore, according to a survey conducted by the Education Ministry, 40% of the 900,000 students affected by school closures were unable to follow lessons because they lacked access to cell phones and unlimited data at home (New Straits Times, 2021). Secondly, many institutions lack sufficient information technology (IT) resources to carry out assessments. Additionally, educators are lacking in IT training and knowledge (New Straits Times, 2021).

In a nutshell, ODL requires extensive coordination, cooperation, education, as well a change of perception to embrace it (Clark, 2022). ODL is deemed to be more easily executed among more mature and independent learners, such as tertiary level students. According to Boettcher & Conrad (2021) revealed that coordination is very important when it comes to teaching and education. Thus, the researchers addressed explicit questions about the accessibility, readiness, and effectiveness of ODL teaching methods. The researcher also addressed implicit questions regarding research and various measurement methodologies.

Research Objectives

- ☐ To explore the accessibility of materials and internet access for ODL in Malaysia, according to secondary school teachers.

- ☐ To investigate the readiness in methods used by secondary school teachers when using ODL and applying it to their students.
- ☐ To perceive the effectiveness of ODL among secondary school students from the viewpoint of their teachers.

Research Questions

- ☐ How is the accessibility of materials and internet access for ODL in Malaysia according to the secondary school teachers?
- ☐ What are the suitable methods that can be used by secondary school teachers when using ODL and applying it to their students?
- ☐ How effective is ODL among secondary school students from the viewpoint of their teachers?

The Accessibility of Internet

Rural Area

Teachers have been urged to improve upon the methods to deliver their lessons. This becomes especially pertinent for teachers teaching in rural areas, such as in the interior of Sabah where students not only have limited Internet access, but also a lack of smartphone availability, as reported by an article entitled "Curriculum realigned to help students during Covid-19" (2020). The article further states that Sabah Deputy Minister Datuk Seri Bung Moktar Radin remains hopeful that students will continue to meet their teachers face-to-face during their lessons. "Some instructors have resorted to sending notes only by foot to the students"(Bung Moktar Radin, 2020). In line with the theme "Teaching for Knowledge, Shaping a New Generation", Bung stated that educators play a crucial element in shaping a person's character and abilities to be a beneficial network in the future.

Urban Area

Unlike their rural counterparts, urban students have widespread Internet accessibility. Students can use any method to access the internet as long as they have a computer and an internet connection (Rodney, 2020). The internet's accessibility has made it easier for urban students to gain a better understanding of their subject. Despite widespread coverage however, the Internet connection in urban areas can still be unstable and slow, and the most economical Wi-Fi packages are also the most unreliable. This leads to difficulty for students to complete assignments on time or to be fully engaged in learning.

The Effectiveness of ODL among Secondary School Student Advantages of ODL

The first advantage is flexibility. Equipped with a computer and access to the Internet, students can seek information at their convenience (Leob, 2020). For example, people who are employed make up a bigger share of individuals who enroll in distance learning and at the same time can learn while earning. As for the secondary student, it is possible to study after leisure time, late at night, or on weekends. Thus, online learning resources and teaching are available at any time.

The second advantage is no commuting. With ODL, students do not have to spend money or time commuting to and from class. The majority of ODL approaches in schools use online video conferencing to conduct lectures and tutorials, which eliminates the need for students to remain in the classroom, especially during the pandemic. According to Leob (2020), class

sessions can be enjoyed from the comfort of the living room couch, bedroom, or garden. Innovative file sharing features are available with video conferencing solutions like Google Classroom, which also adds a participatory element.

The third advantage of ODL is cost saving. According to Leoh, when compared to face-to-face classes, the cost of online-based learning is often lower. As a result, both students and parents find online learning to be cost-effective. Secondary students have the perfect opportunity to save money on their studies in addition to the convenience of doing ODL from home.

Disadvantages of Online Distance Learning (ODL)

The first disadvantage is the high chances of distraction. Those secondary students may find it difficult to keep track of their course work and assignments due to the lack of face-to-face communication with their teachers and other students (Mukhtar et al., 2020), which is important as they need continual reminders about pending work or deadlines. To complete their study successfully, self-motivation and dedication thus become important. As a result, remote learning is not a viable option for students who are prone to procrastination or who are unable to meet deadlines.

The next disadvantage is a lack of social interaction (Mukhtar et al., 2020). ODL restricts secondary students to online-based classes and learning materials. Students can communicate via chat rooms, discussion boards, emails, and/or video conferencing software, but the experience is not comparable to regular classes. Because the learning process is done through the Internet, there is no physical interaction between students and teachers.

And the third disadvantage is complicated technology. The ODL approach requires a student to purchase a computer, a webcam, and access reliable internet connection. As ODL is overly reliant on technology, in the event of a software or hardware failure, the class session will come to a halt, potentially disrupting the learning process (Mukhtar et al, 2020).

Technological Issues

One of the most frequent problems experienced by teachers when teaching online is technology related. Some teachers might not have the technology needed to teach online classes, and others might have trouble using the technology. The lack of technical expertise is the main cause of this. Malaysia's online education system needs to be improved, particularly the caliber of student interaction and instruction provided throughout the course (Aliyyah et al., 2020). To improve the delivery of online instruction in Malaysia, some changes should be done (Selvanathan et al., 2020).

Communication Challenges

Due to the difficulty of miscommunication and their inability to elicit the appropriate response from the students, teachers report being unable to interact with the students in an appropriate manner through online classes (Caena, 2021). The case is no different in Malaysia. According to Mukhtar et al (2020), to increase and develop an interactive learning approach, institutions should offer more suitable e-learning platforms. To further develop teachers' and students' technological and pedagogical competencies for online learning, workshops or trainings are required (Mukhtar et al., 2020). To address such shortcomings, countries have employed various online learning modalities during the current. For instance, New Zealand employed an innovative approach of combining two television channels, Internet delivery, and

printed curriculum resources to deliver educational content. They were able to complete the children's curriculum using this method (Mukhtar et al., 2020).

Virtual Engagement

The teachers can only provide the study materials online for the virtual interaction with the students as they are unable to upload the entirety their notes online. Therefore, students cannot get the most out of it through online learning (Anu, 2021). Students will typically recognize educational materials if they value them. Teachers must understand that students will only engage with course materials if they perceive them as valuable, especially in remote classrooms (Anu, 2021). Helping students interact with content in online learning environments in a way that makes sense to them is crucial.

Most of the educational staff in Malaysia is not equipped to conduct online instruction (Anu, 2021). In this pandemic situation, face-to-face teaching is seen as a threat in many educational institutions. As a result, teachers concentrate solely on instructing in supplementary classes (Vanpetch & Sattayathamrongthian, 2020). However, such arrangements do not necessarily take into consideration student schedules that would typically include practical classes, seminars, or part-time classes.

Time Management

Based on Ahmad et al (2019), effective time management is the main accomplishment of both distance and traditional students. Some teachers cite time consumption as a challenge because they require more time to familiarise themselves with the new teaching methods and to adapt to the technology. However, time management issues can affect students' academic performance besides raising the teachers' stress levels.

Methodology

A qualitative research method was chosen for this exploratory research to determine the effectiveness of ODL among secondary school teachers in Malaysia. The qualitative method is known for its ability to produce extensive amounts of "thick" descriptive data and illustrate the complexities of human experience (Taylor & Bogdan, 1998). People are given context and significance through a qualitative study. Rossman & Rallis (2017), for example, stated that "numbers do not tell a narrative; distilling down replies into numbers wipes away the context, removing much of the depth and complexity that make research realistic". Similarly, qualitative research excels in confirming and testing pre-existing theoretical notions (Neuman, 2021). The qualitative approach means gathering data, not in the form of numbers, but from the interview script, field notes, personal documents, memo notes, and other official documents. Qualitative methods as a research procedure produce descriptive data in the form of words which are either written or verbal statements from other people and observable behaviour.

This research uses an interpretive paradigm. Interpretive qualitative research is typically employed in cases whereby participant observation and field research are conducted. Interpretive is the systematic analysis of socially meaningful action through the direct detailed observation of people in natural settings to arrive at the understanding and interpretation of how people create and maintain their social worlds (Neuman, 2021).

The methodology in this study involved four stages – preliminary research and selection, literature review, data collection, data analysis, discussion, and conclusion. Moreover, this

research formulated a descriptive topic because it contains assumptions from various parties related to ODL, especially during the pandemic. Theories found in existing literature were referred to in this research, and after finding theories related to the topic, the next step involved decrypting the results of the analysis. The suitable type of qualitative research to be conducted was thus a qualitative case study employing thematic analysis.

Apart from that, this study utilised in-depth interviews, and secondary data based on existing research as these could assist with questionnaire development and provide necessary insights before conducting the primary research (Lexy, 2010). The interviews were conducted using an interview protocol among five (5) informants between the ages of 27-32 from schools all over Malaysia, including Johor, Selangor, Perak, and Terengganu. Additionally, when used in the broader context, saturation refers to the point in data collection when no additional issues or insights are identified and data begin to repeat so that further data collection is redundant, signifying that an adequate sample size is reached (Saunders et al., 2017). Moreover, data saturation is important to achieve. It is reached when there is enough information to replicate the study, when the ability to obtain additional new information has been attained, and when further coding (identification of themes) is no longer feasible (Saunders et al., 2017). Saturation point was reached in this research informants once the researchers noticed the repetition of the same themes occurred in the interviews.

The interviews were conducted using a combination of phone calls and an online platform via Zoom Meetings as was still in the pandemic phase at the time of research. The researcher initially wanted to do the interview session through online platforms only by using Zoom Meeting, but some of the informants requested to switch to phone calls. The primary challenge faced when using phone calls involved the restricted ability to formulate more complex questions (Research, 2021). Discrete choice modelling and other research methods with complicated questions need to be seen to be understood. Besides that, unlike face-to-face or focus group interviews, interviewers—no matter how experienced and skilled—do not have the ability to observe body language. For example, if an informant furrows his brow in the middle of a call (likely indicating a lack of understanding), interviewers or the researcher will not be able to adjust accordingly in real-time. Apart from that, the disadvantages of using online platforms for conducting interviews are the internet connection issues (Martin, 2022). The researcher and the informants depended highly on a stable and fast Internet connection; therefore, when the connection was interrupted at certain points during the interview session, it derailed the smooth flow of the process. Poor video quality is another challenge that took place during the interviews as informants' answers and their accompanying expressions cannot be adequately captured.

In addition, each informant was interviewed using the same five sections of semi-structured, opinion-based questions related to their field of experience and knowledge. The interview typically lasted about 30 to 40 minutes and consisted of private, face-to-face conversations between the interviewer and the informants. The interviews were conducted in a conversational format that was both free-flowing and structured. Moreover, during the interview, the interviewer was free to ask questions and probe responses that seemed interesting and relevant to the research's goals and informational needs. Feedback and responses from the interviews were examined by utilising the thematic analysis process to generate key themes. Thematic analysis is one of the most frequently used methods of qualitative analysis. In thematic analysis, the task of the researcher is to identify a limited

number of themes that adequately reflect their textual data. According to Jansen (2022), the thematic analysis offers more flexibility for the researcher once results have been obtained. The researcher grouped all the gathered data upon completion of the interviews. This method allowed the findings to be more easily read as the answers were collected and grouped corresponding to the question.

Informants were selected using the non-probability sampling method as it was expected that an initial informant could recommend the names of other secondary teachers. The researchers interviewed five secondary teachers as participants. They were men and women who ranged in age from 27 years-old and above, and who teach at both rural and urban secondary schools. Majority of informants identified themselves as new joiners' teachers because most of them have only accumulated less than 7 years teaching experience. New joiners, also known as newly hired employees or "new hires," refer to any employee or teacher who was hired by the school and is still employed as of the date of a new employee orientation (L, 2021a). Despite only having less than 7 years' experience, their answers would still be reliable as they faced ODL during the pandemic as well.

Non-probability sampling was chosen to be non-representative to ensure that demographic characteristic of interest is represented in the sample. Convenience sampling is one of the non-probability sampling techniques in which samples are chosen from the population solely based on their accessibility to the researcher (Fleetwood, 2021). Because of its speed, cost-effectiveness, and ease of availability, convenience sampling is the most common non-probability sampling method. This is one of the reasons why researchers rely on it. Many articles, book chapters, and books recommended some guidance and suggest a group size of five to fifty participants (Dworkin, 2016). Thus, in this research, a total of five informants were predetermined (the details are displayed in Table 1) and selected by the non-probability sampling strategy. This approach was also referred to from past research. Participation by the informants was voluntary, and no token or reward was given to them.

The interviews were conducted using the video calling feature as this research was done during the COVID-19 pandemic phase. Each recorded interview lasted between 30 to 40 minutes. though some took several hours to complete (DiCicco-Bloom & Crabtree, 2006). An in-depth interview is traditionally conducted in person or over the telephone with the researcher asking questions to an individual participant. Apart from that, a qualitative research technique known as "in-depth interviewing" was employed. It involves conducting lengthy one-on-one interviews with a small group of participants to learn more about their perspectives on a given concept, plan, or circumstance. For instance, the researcher might ask informants, staff, and others connected to a programme about their perceptions of any changes in themselves because of their participation in the programme (DiCicco-Bloom & Crabtree, 2006). To examine interview data or request clarification on a particular response, the researchers performed interviewee checks and sent follow-up emails.

Table 1: Informants' Characteristics

Informants	School Name	Position	Total Years of Teaching
Informant 1	SMK Paloh Hinai, Pekan, Pahang	English Teacher	2
Informant 2	SMK Parit Bunga, Muar, Johor	Language Teacher	7
Informant 3	SMK Bukit Tunggul, Kuala Terengganu	Science Teacher	5
Informant 4	SMK Dato' Abdul Rahman Ya'akob, Bota	Visual Art teacher	5
Informant 5	SMK Subang Utama, Selangor	English Teacher	3

The interview process was guided by an interview protocol that contained a series of open-ended questions about the participants' ODL journey. The selected questions provide a brief introduction to the problem. Questions were asked in a predetermined order based on specificity. Key questions such as, "What are the key issues during home teaching and learning (PDPR)?" were posed. This was intended to familiarize participants with the interview process, besides giving ample room for the researchers to explore how the secondary school teachers would respond to this question. Follow-up questions such as "How does ODL accessibility in your teaching geometry area?" prompted informants to state-specific experiences related to the position of the teachers' home location to the level of teaching. To gain further information and encourage dialogue, the investigator asked further questions or inquiries such as "How are the teachers willing to teach their students?", "ODL effectiveness based on their opinion?" and "Suggestions to improve ODL teaching methods in the future?"

In addition, the findings of the research were conducted using inductive thematic analysis. Thematic analysis is a method of analysis that requires the analyst to scour through the qualitative dataset in an organized manner and analyse it effectively to uncover the hidden trends and other inferences based on a criterion or a theme that was predetermined by the researcher (Jansen, 2022). Thematic analysis is divided into two types. In conducting an inductive analysis, the researcher opens themselves to the possibility of emergent themes, with criteria to categorise these themes set as the research progresses. In this type of thematic analysis, the nature of data collected dictates the themes to be used for the study (Braun, 2006). Meanwhile, deductive analysis requires the researcher to set a strict definition or boundary of themes along with what kind of data would qualify for it. This research will adopt key steps of thematic analysis as suggested by Braun .

There are six key steps of the thematic analysis by Braun (2006)

1. Familiarisation with the Data – This step involves reading and going over the data several times to fully understand it so that the researcher can make an analysis. It involves the process of transcribing the recordings into text form to make it more manageable.
2. Coding the Data – After data transcription and comprehension, the researcher now needs to identify the main features of the data and to take notes. These notes can be in

the form of codes or labels or simply highlighting the text with different colours. Each colour should correspond to a particular research question.

3. Generating Initial Themes – After coding the data, the researcher takes a closer look at the text and identifies the initial patterns or themes in the data. These themes will form the basis of the researcher’s thematic analysis.
4. Reviewing the Themes – In order to make the analysis more efficient, the researcher has to make sure that the as-identified themes are appropriate and sufficient for the research objectives. This will give the researcher an opportunity to ensure that the thematic analysis is going in the right direction. And the researcher can make the final changes to the themes and criteria as needed.
5. Naming and Defining the Themes – This is an important step as it enables the researcher to set boundaries and make the distinction between the data. It helps in organising the analysis and avoids any potential mix-ups and confusion between the different themes and data.
6. Writing – After the researcher has identified, named, and defined the themes carefully, the researcher should now begin to categorise the data and proceed to the next stages of analysis.

Research Findings

Seven emergent themes were revealed from the interviews. Sub-theme 1 and 2 answered the first research objective of this study while sub-theme 3 and 4 answered the second objective. Moreover, the third research objective is answered as per sub-themes 6, 7, and 8. All the sub-themes is shown in Table 1 below.

accessibility of materials and internet access for ODL in Malaysia, according to the secondary school teachers.
Sub-theme
1) Technological Access and Facilities
2) Satisfaction of Facilities
ess in methods used by secondary school teachers when using ODL and applying it to their students.
Sub-theme
1) Knowledge and Technological Skills
2) Teaching Tools
DDL among secondary school students from the viewpoint of their teachers.
Sub-theme

1) ODL Teaching Effectiveness
2) Students Participation
3) Benefits of ODL
Informants Suggestions

Table 2: The Thematic Analysis Table

Technological Access and Facilities

Based on the first objective of this research, which is to explore the accessibility of materials and internet access for ODL in Malaysia, interviews with the secondary school teachers led to researchers developing the theme of technological access and facilities. The most common issue cited by the informants is the lack of access to technology. The challenges included limitation of Internet access due to unstable Internet connection, unstable Internet speeds, and insufficient data for those who are using mobile data. As frequent synchronised communication is necessary for online teaching and learning, it is crucial to look into this issue. As Informant 1 and Informant 2 stated:

“The student’s part is a bit problematic because they can’t join the classes. In urban areas, I don’t think they have much problems since they have strong Internet connection, and most of them come from good social economic background status compared to students from rural area because majority students in my school are indigenous people or Orang Asli and they only have one gadget at home, so that [they] have to share that one mobile phone among the siblings.” – Informant 1

“Sometimes there is a problem such as the Internet and software, it does take time for me to connect, so I have to prepare 30 minutes earlier since it’s something new since its first time for me. Of course, ODL cost me a lot compared to face-to-face especially for the gadget and the software where some of software is free and the gadget obviously not free”. – Informant 4

An unstable internet connection will result in less effective lesson delivery. Quality technology infrastructure should be prioritised as recommended by UNESCO and OECD to ensure education continuation using the online learning platforms (UNESCO, 2020; Reimers & Schleicher, 2020). However, this issue has not been resolved satisfactorily during the implementation of the VLE-Frog for learning management system (Ramli & Saleh, 2019; Awang et al., 2018).

On the other hand, there are also informants who used their personal internet connections and devices to carry out remote teaching. This is according to information from a local newspaper, which noted that committed teachers were carrying out remote teaching or ODL using their own devices and ingenuity (The Sun Daily, 2020). This was reflected in Informants 2 and 5 responses to the query of whether informants to this study experienced facility-related problems:

“Fortunately, I don't have any problems with facilities when I'm conducting ODL. I use my own devices, and the Internet in my area is fast enough for me to complete my work. As a language teacher, there is no issues on ODL as long as I can speak with them, show [materials] on screen, use graphic cards or anything as some students may not have a good Internet connection, so this would be a bit challenging. But in cost wise, it is much safer because all materials are online, and I can use quizzes via Google link instead of giving hand-outs to the students”. – Informant 2

“Well, it is for me I think it is very accessible and it can go anywhere, and I can access to anywhere and the portal itself”. – Informant 5

However, it is no surprise that the best technology infrastructure is unaffordable at a time when people are financially challenged due to movement restrictions under the MCO (Dhawan, 2020). Informant 3 said that she has no problem with ODL as she said going to school is time-consuming. She added that:

“I think it is easier for me to connect to my students using the Internet because I can save my time which I can prepare the materials before I start teaching instead I go to school and whenever you are going to school, you will need extra time to prepare, like before you go to school next day, you have to prepare the materials at night before you start your next day. So, it's time consuming for me because you need some time to prepare the materials. But you have to be able to afford and pay [for] the Internet especially during this financially challenging pandemic time. Thus in my opinion, without proper internet and devices during ODL, the lesson cannot take place”. – Informant 3

Satisfaction of Facilities

Nowadays, many opinions are shown and given when it comes to the satisfaction of the facilities. This theme was formulated following interview findings that suggested technology has improved over the years. For instance, Informants 1, 2, and 3 said that:

“Overall, for [the] teacher's part, I am satisfied with the technology and software use, but for the students' part, there is still a lot of things that we can and we should improve especially the government should prepare and upgrade the Internet connection so that all students regardless where ever they come from, they will be able to enjoy online classes”. – Informant 1

“Yes for [the] most part I am very satisfied because my learning plan such as listening and writing are all accessible and available on Zoom”. – Informant 2

“As for now, yes for me, because I have gotten used to the software and also the technologies that I use whenever I am teaching the students online. And I think we need some improvement whenever it comes to teaching the students where we need to have standardised systems which we can access the materials online so it will be easier for the teachers to teach the students”. – Informant 3

Two informants, on the other hand, had a different view on this matter. Informant 4 felt mixed feelings as she admitted to technology use being hard to understand:

“To say satisfied, I must be lying because the problem is on and off and sometimes the technology is hard to understand, so I have to figure out before I use it. Same goes to the software where usually have study the software before I start learning process. So to say satisfied, maybe fifty-fifty where sometimes I am satisfied, sometimes I am not”. – Informant 4

Informant 5 stated that software improvements and upgrades are needed to ensure that the system operates smoothly:

“Not to say that I am very satisfied, but it needs improvement. I think the software is experimental, but it needs an upgrade to make sure that the system is stable, so everyone can use it at the same time”. – Informant 5

In a nutshell, the responses above have shown varying degrees of satisfaction when it comes to the current technology in use. Although technology has evolved over the years, improvements are a constant requirement. Everyone needs the Internet to communicate and socialize, and to access important resources.

Moorhouse (2020) extended the argument by saying that the lack of experience in online teaching and the use of IT to teach among school teachers are common. Moreover, Peachey (2017) urged teachers to equip themselves with the necessary skills. The occurrence of the COVID-19 pandemic is an opportunity for all teachers to use ICT for online learning. This will develop fundamental IT skills training to help teachers mitigate their challenges, while at the same time foster a sense of satisfaction among them.

Knowledge and Technological Skills

The theme of knowledge and technological skills was developed based on the second research objective. Teachers lamented facing challenges in changing the style of teaching that suited face-to-face methods to ODL methods. Teachers were expected to be able to use the online learning platforms immediately during the abrupt shift to online education (Zhang et al., 2020). Teachers explained that they lacked the knowledge and abilities to upload offline (hardcopy) materials to online platforms, a struggle exacerbated due to lack of online teaching skills and experience. As a result, they encountered difficulties in developing instructional materials that can accommodate learners of various abilities, developing universally applicable teaching strategies, and developing synchronous lessons. Informants 1, 2, 3, and 4, however, said that they were confident with their knowledge and technical skills

“Well honestly, if I were to evaluate myself, I would say I’m competent in using technology to assist my teaching. For the teacher’s part, we still conducted our lessons just like we did in our classroom, and we still have to do the lesson plan, so the lesson that we deliver regardless of whether it is online or face to face, it is basically the same.

We have some allocations for activities for closure for questions and answers. So basically, there is not much difference because we still have to follow the original lesson plan, so everything went well". – Informant 1

"For me, my school has already used online systems so I'm already familiar with PCs and laptop, attendance systems and marking [which] are all [done] online, so we have no problem with that". – Informant 2

"Basically I will prepare and make sure all the materials and technologies that I'm using have been prepared a day before. Let's say when I want to start to teach tomorrow, I will make sure all of the items are ready the night before I start the class tomorrow. So I think it's easier for me whenever I am at home because I have access to the systems, files and materials that I need to prepare for tomorrow's lessons. My time management is manageable because I can prepare my materials better". – Informant 3

"As far as I'm concerned, my readiness is good because I always prepare myself an hour before [I] start and I prepare all the materials according to the subject in order to follow my time management to make sure everything goes smooth without any sudden distraction because some problem might delay my preparation and my class, so I don't want all the students to wait for me, so yeah I always get ready early to make everything smooth". – Informant 4

Informant 5 admitted that he was not as adept at using software, though he learnt along the way, which consequently resulted in increased competence.

"To me, using online software is very weak. Not to say that I'm not confident but being the first-time user, so I am learning it by someone teaching me as my sister taught me how to use Google Meet, Teams and also the features [such as] how to make a call. I [wouldn't] say [I'm] confident, but I get used to the systems and it's very easy to use actually". – Informant 5

Based on the above responses, an effective lesson delivery thus is dependent on the capacity to combine technology, content, and pedagogy based on the teacher's knowledge and skills. According to Koehler et al (2013), technology content knowledge (TCK) is the comprehension of specific techniques that support the teaching of the subject matter, whereas technology pedagogy knowledge (TPK) refers to a teacher's expertise in modifying the teaching and learning process in accordance with a specific technology that is newly introduced. Even though a large number of people own Internet-connected devices like smartphones, it should not be assumed that they are tech-savvy, as they can be much less capable of teaching using technology.

Teaching Tools

The lack of better equipment to prepare and deliver lessons during the COVID-19 lockdown stage was a problem for some of the informants during the interview, as they experienced tension that resulted from having the knowledge to properly plan a lesson but failing to

capture the intended learning (Nielsen et. al., 2015). The lack of students' focus as a result of technical difficulties is captured in these comments from Informants 1 and 2:

"We ourselves [were] not well equipped with teaching tools, not [being] well equipped means [having] a good camera, a good audio to support the teaching. Plus I don't think I have stable Internet connection because it's really hard even to use WhatsApp at home because my house is not in an area where the Internet connection is strong, so I have to go to school just for the sake of doing online classroom. And as for the device, I used an Ipad for my online teaching because it is more convenient rather than having to use laptop because I have to carry a lot of things and also [the] teaching props. So, I used Ipad to help me in terms of delivering my teaching materials". – Informant 1

"I do have high speed Internet at home and I am using my laptop but my sister which is also a teacher is always borrowing my laptop". – Informant 2

Teachers must also be adaptable in how they present the lesson plans to the students (Nielsen et. al., 2015). Informant 3 said that at first, she faced problems in conducting her classed since there are limited functions available on Google Meet, forcing her to switch to Google Meet or Zoom Meeting depending on the number of students in her class. She also added that:

"Yes, I have high speed Internet at home and normally I use my laptop and my DSLR camera that I use to show my face and the materials that I'm going to use whenever I'm teaching. For the software itself, I normally use Google Meet but usually it depends on how many students that I have, for instance, if larger group of students it requires me to use Zoom Meeting but if it is a one-to-one session with the students, I would prefer Google Meet because it is easier for me to use". – Informant 3

Apart from that, Informants 4 and 5 also said that they experienced issues with Internet access and the software itself. They found themselves becoming reliant on the same software as they were not able to use the teaching aids, they had previously used in conventional classroom settings. Nevertheless, they admitted that the teaching process had become smoother. Some online teaching tools have been found to reinforce traditional ways of teaching, such as YouTube videos that feature the 'stand-and-deliver' method favoured by TED Talks, MOOCs, and other forms of instructional videos (Allen et al., 2020). Informants 4 and 5 further added:

"I'm using design since I'm teaching visual and arts, so the software is quite familiar for me, so everything will become smooth but for the rendering and downloading the picture sometimes it does take time. I am using Google Meet where at first I wasn't very familiar with it, but now everything is good with Google Meet". – Informant 4

"Well, right now I'm using a 5G unifi, 500mbps [Internet connection], previously I used an old one, so now I've upgraded to a new one, so I have no issues at the moment but sometimes it gets stuck. So when the Internet connection gets stuck,

it's very hard for me to go to the portal itself. It will take sometimes like after everything sorts out, then it will be fine. I use Google Meet, Zoom Meeting and Teams in conducting my classes". – Informant 5

ODL Teaching Effectiveness

This theme was created based on the third research objective. The teachers reported mixed feelings regarding their opinions on the effectiveness of the ODL teaching method. Informants 2, 3, and 5 agreed that ODL is effective

"Yes it is effective because it will expose them more on technology as we are currently living in 21st century as we know, and besides that it can guide students to look for other alternatives and use the benefit of technologies to communicate".

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Informant 2

"Yes, for me it's effective because actually it can help the students to be independent and they are going to have their own time for self-learning which lets them to develop the skills to operate and open the systems itself and they can explore their talent, their skills and they will be eager to do that. I also can help them to show their creativity since whenever we are teaching them, we can help and guide them to show their true skills, their communication skills, and also their knowledge whether they adapt well or not with current knowledge we give them at that moment". – Informant 3

"It is very effective because they will get the picture clearly [such as] how visual impacts their life, how does this whole thing make them technology savvy, because right now technology has evolved, so they need to follow the trends, otherwise they are not capable enough to adapt to a new technology". – Informant 5

The other informants added that ODL can be a great tool though its effectiveness is dependent upon the geographical location, as urban areas would be equipped with better infrastructures, and hence more reliable Internet connection, compared to rural areas. Another informant said that she prefers the traditional method, which is physical class as she thinks that students will easily get bored and distracted at home when they are supposed to be focusing on class. Additionally, an unreliable Internet connection hampers the effectiveness in conveying information to the students:

"Just as what I mentioned earlier, yes, ODL can be a great tool as an alternative to face-to-face classrooms, but then you need to take into consideration the students' geographical location where in rural area it is not much effective since we have poor Internet connection and what not. However, for urban students, yes it's very helpful because they have all the devices and Internet connection and what not to help them to go through online learning". – Informant 1

"To be honest, I think it is not really effective because students can focus more on traditional method which is face-to-face because I think they are getting more bored and they don't have the motivation to attend online classes because there is

distraction around them, so it makes them unable to concentrate the learning and unable to fully understand the information since the teacher is not there. Maybe it is effective to some students if they like it, so it depends on the students itself”.

Informant 4

For majority of organisations, effectiveness is the most important factor in achieving their objectives and successes. However, secondary schools are also aware of the value of conducting ODL effectively during the COVID-19 pandemic. It is also well known that ODL's institutional and administrative productivity and effectiveness play a crucial role in determining the development, retention, and outcomes of students. This is supported by Musa et. al (2020) who stated that to achieve effectiveness in conducting the ODL, several things should be taken into consideration, including the interaction during ODL, motivation of the students, student performance, information, and communication technology (ICT), as well as technology support system.

Students Participation

The next theme is student participation. Informants agreed that issues arose concerning students' attendance when ODL was implemented during the MCO. Informants 1 and 2 cited poor Internet connection as the reason, whereas informant 3 said that student attendance would decline in higher-level classes:

“Yes I did face a problem especially with the students' attendance because from my observation, most students from my Form 4 and Form 5 classes they would not really want to join the class for several reasons, but most of them responded that they have poor Internet connection because the school is located in the rural area, and everyone is actually living in the village, so to get stable connection is very hard, so most of the time they would not be able to join the class because of that. I would say that for example for Form 5, out of 27 students, only 5 will be able to join my ODL classroom through Google Meet or WhatsApp video call. The rest would take the initiatives and ask the teacher to prepare a module for them and we would photocopy all the modules enough for the students and they would come to school and take the module and do them at home.”. – Informant 1

“Yes, it's a bit difficult to get every students' attention during the session, but so far, it's manageable. And actually, I am teaching Form 4 students and my class has a total of 15 pax, and so far the attendance [numbers] are good, only 2 to 3 students have been absent in a week”. – Informant 2

“As for attendance, it depends because certain classes have around 20 to 30 people. So, whenever you are reaching higher level of education, you will have different group of target which the number of people will be lesser again. Whenever I teach Form 4 and Form 5 [students], I would have a lesser group of people”. – Informant 3

Informant 4 also mentioned the disappointing student attendance for her class, which could be explained with the lack of access to the required devices for some. As a result, these

students needed to share with their family member the devices needed for ODL. She further added on the matter of data privacy and security:

“I’m having problem which is data privacy and security. When we teach online, I’m afraid about data infringement and hackers because we are using online [methods], so I’m afraid my data [would be leaked] during the class streaming, so I think we don’t really know how to protect our devices, thus it is our problem. Besides that, the attendance can be disappointing because they don’t really want to join and choose to [be] absent, every week maybe 3 or 4 students [would be] absent and I’ve tried asking the other teachers, the same students [would] still absent during the class. So I think the students don’t really want to join the ODL. And I’ve tried to ask the students too, and they said they usually have Internet connection problem but for me they [were] actually getting bored because it is repetitive”. – Informant 4

Meanwhile, Informant 5 said for his class, student attendance very much depended on the students’ attitude towards studying. He encouraged them to attend the ODL classes by reminding them that they did not need to risk their lives by travelling to school during the precarious COVID-19 season:

“There’s a lot of challenges that I face in conducting ODL during the pandemic, the main issue here is internet connection, and the system is too slow and difficult for me to log in to the systems while everyone is using the same portal, so it would [cause the portal to] hang. Student participation was decreasing from time to time. Sometimes I don’t have full attendance in the class, but then I manage to encourage them to use this ODL method because they don’t have to risk their life to go out to school. Like it is very high risk right now to go out as cases of COVID-19 has increased, so this is an advantage for them. As in my class, I have 25 of them, but most of the time I have around 13 people, someday I have 24 students, and someday I have 25. So it depends on their mood whether they want to study or not”. – Informant 5

The informants’ insights suggest a worrying trend regarding student participation during ODL. According to Fredricks et al (2004) student engagement refers to the dedication or investment made by students in their academic pursuits. Based on the article written by Bergdahl, et al (2020b) students’ disengagement might differ, including the use of technology without permission or for non-academic purposes and lack of access to (functional) technology. Another influencing factor is the sheer number of notification that the students receive on their devices, plus an overload of information, which could be distracting.

Furthermore, students who use technology to combat boredom are emotionally drawn to the tool, experience frustration when using it for learning, and/or are resistant to using it. Students’ tendencies to view group technology work as upsetting or demoralising, view the individual digital technology work as irrelevant and do not want to be left alone to manage tools without assistance.

Benefits of Online Distance Learning (ODL)

All five informants agreed that ODL has its benefits. From their point of view, the benefits of ODL are varied and one of them is the use of technologies that can reduce the risk of being affected with COVID-19 as posited by Informant 2 below:

“Yes because they can use the technologies in the time of need, and reducing the risk of Covid impacts as well as maintaining classroom environment but without face-to-face instruction. For example, students can still use Zoom Meeting and etc. to interact with the teachers and if there’s anything that is not clear, they can use the options available in the Zoom, even though face-to-face [instruction] is more effective, but it’s better than nothing right?” – Informant 2

Informant 1 stated the benefits of ODL is parallel to the geographical area
“Honestly I believe that secondary school students would somewhat benefit from ODL depending on the area. Meaning to say, for my school since it is located in a rural area, it is actually not much of a help because as I mentioned earlier, students are unable to join the classes, so it will actually impede their learning progress, meaning to say they don’t really learn much because they couldn’t join the class and even for those who join the class, they are unable to get a stable Internet connection, so sometimes their connection got cut off, and they suddenly left the group or meeting room. So it’s really hard for them even to just join the meeting room or the lesson”. – Informant 1

Other informants have expressed varied sentiments regarding this. Informants 3 and 5 said that secondary students could manage their time when ODL was conducted during the pandemic, because they had more time at home to study and review the syllabus before the start of their classes:

“I think students can actually get benefits from ODL because they have more time to study and learn because when they are at school, sometimes they need to spend more time to get to the class, right? And it will take some time to the students to get to school. So for me, I think it helps students to save their time”. – Informant 3

“For me, if I were a student, I think that it is beneficial to the students because they learn to manage their time, they can go through the slides and the syllabus before they start class, and it is very useful for them to learn by ODL. ODL is good”. – Informant 5

Informant 4 remarked that ODL is beneficial since it involves the students’ parents. When students have classes at home, the parents would typically be involved, especially in making sure that their children complete the tasks set by the teacher:

“Yeah, I think it involves parents and also their engagement, so when they have online ODL, the students would have a better involvement because their parents are there with them and their parents [can] coach and ensure whether the assignment is completed or not, so the parents can also engage and encourage and support their children and for me ODL is something fun and interesting as long the teachers know how to attract their students because students easily get bored,

so we have to make everything interesting for them to focus [on] the learning". – Informant 4

Therefore, from these findings, ODL does benefit the students, especially in managing their time. This could reduce the risk of COVID-19 implications and increased attention and assistance from their parents. This is supported by Clark A. (2022) in her article who said that the advantage and benefits of ODL, include its flexibility whereby teachers and students can adapt to the learning following personal schedules. Parents can also assist their children in completing their homework. Besides that, it eliminates the commute and hassle of getting to class. Apart from that, it saves time by allowing students to hone their time management skills (Clark, 2022). Also, it helps students to develop their technical skills as a tech-savvy workforce is in high demand and the majority of ODLs use some mode of technology for content delivery.

Informants Suggestions

The informants offered some thoughts and suggestions on how the government could help address the issues that teachers and students face in conducting ODL during the pandemic:

"As a whole I think that the only way to solve ODL is the government should make some initiative to upgrade the Internet connection especially in a rural area because it's really hard not just for the students but also for the teachers to organise online classes because we don't have stable Internet connection. But then for the teachers' part, what we can do is to encourage students to go to an area where there is

stronger Internet connection like maybe they can just go to their friend's house. I think overall it's the government part to play their role to upgrade the Internet connection.

And I think one of the most challenging learning environments is that for rural students, they do not have the gadget, so at least they should have one computer at home so that they can do their work because nowadays it is not just only the homework given by teachers, but they also have to participate in online programmes during COVID-19 where most of the events or competition were conducted online. So if the government would be able to provide one computer for every poor student so that they can actually have a means to do the online learning at home, I think that would be wonderful". – Informant 1

"Since now we have classroom learning and ODL learning, so maybe we can have a hybrid learning environment, so like those who are able to come to class, they can come and those who are not able to come, they can join via online [methods]. Teachers can teach in classroom whilst setting up their camera for virtual students, as long as the knowledge is shared with anyone without anyone missing out. As a suggestion, maybe the school can provide access to Zoom meeting for all students such as the school management can create premium account for them so that we can communicate more in the sessions because when we are using free access, it is quite limited time wise, so hopefully this would be a good suggestion". – Informant 2

"I think the most challenging part is to make sure that the students are independent. Because not all students are independent, and we have to make sure that we guide them, so I think it's challenging for me because we have to make sure that we convey the information that we teach in school to them. But I think from time to time, people especially students are aware that they need to be independent, and it might take some time for them to get used to being independent. Also as for me, I have no issues with teaching online, but I have issues when it comes to managing the task because we know that we have to access [them] when it comes to online storage like Google Drive, it's limited. I think we should have a system where the teacher can store documents of files online, which has better storage. So that we can prepare documents such as videos, which will help the teachers to save the files online later. Thus schools and the government should take a look at this matter". – Informant 3

"To be honest, first is for computer literacy and digital device, because not all students can afford to have their own gadget especially in rural areas where some of them have to share it with their siblings to join the class. So I think the government can help by upgrading the technology infrastructure as well as lowering the price and Sales and Service Tax (SST) to make it affordable for those who needed so it can help them. They have the will to study and they want to learn so we have to help them. Aside from that, about the connectivity, the rural areas don't really have Internet [access], so it's hard for them, they have to climb the tree or go to a place that have a connection, so we have to make it easy for them to access. I suggest enhancing this ODL by upgrading the communication technology such as we do video conferencing and discussion forum, so it will connect the students so they will get involved. For example, if we do discussion or a quiz, so that they will interact with their friends in order to answer it.

And aside from that, I think we should create some discussion part so it will make [the lessons] more interesting and playful for them because students get bored easily, so we have to make them remember easily by having the communication technology and the meeting video function enhanced". – Informant 4

"Well I think right now the new generation they do not have interest to learn and it's very difficult for us to attract them to learn. Where we have to for example, give them a reward, or we give them something so that they feel interested to make them learn and they will be participative, and they will support whatever things that we teach and taught them to be. Thus I think this needs to be improved more on the teaching style and their deliverable in the language itself because right now I think language is the most important things here to highlight and we need to have two languages because sometimes there are people who are coming from rural areas so it's very hard for them to find what are the materials been taught to them like they will ask questions like "what does this means?" and "I don't have interest to learn", so yeah, something like that. So, I will suggest that they should add more like a video so that students can visualise things and make something fun which they can learn for example animation and by that they can remember what they learn". – Informant 5

Based on the suggestions from the informants of this interview, it can be concluded that teachers should utilise a variety of technology options. According to Western Governors University (2020), technology is essential for success when it comes to online learning. There are numerous ways in which educators must get ready to integrate technology into their classrooms. Besides that, teachers must develop effective strategies to engage all their students, but it is crucial for them to meet with each student one-on-one or face-to-face when doing so in an online class (Western Governors University, 2020). Other than that, parental involvement is crucial to students' academic success as teachers spend less time with them in the actual classroom settings. To ensure students have the supplies, setup, and technological know-how, it is crucial for teachers to keep parents informed about how they anticipate the school's progress (Western Governors University, 2020). In addition, Western Governors University (2020) added that students have a wide range of learning preferences and teachers can use a wide range of teaching strategies in the classroom to support their students' learning.

In addition, according to O.E.C.D. (2020), education systems should work to improve communication between parents and schools so that parents can receive better information and direction on how to best support their children's learning. Teachers also require assistance in order to effectively integrate technology into their lesson plans and methods and assist students in overcoming some of the challenges posed by this type of learning environment (O.E.C.D., 2020). To ensure ICT is utilised effectively, it is essential to support teachers' training regarding the use of digital resources for pedagogical practice and to promote teaching methods tailored to this environment. In addition, governments and school administrators should try to assist teachers by integrating online tools into their instructional practices. For example, relevant parties should support teachers' pedagogies intended to guide and motivate students toward active learning (O.E.C.D., 2020).

Conclusion

Online distance learning is a form of education that integrates social interaction (teacher, student, and parent interactions) and technical systems (platform, facilities, system, and program) according to (Upadhyaya & Mallik, 2013). The difficulties experienced by teachers when implementing digital technological systems have an impact on the educational system and student communication. The findings indicate that the difficulties for the teachers to conduct online classes could be reduced with the use of choice well-organised strategies and technologies in the digital system. Moreover, the findings reveal various issues and challenges faced by secondary school teachers, involving Internet accessibility, technological issues, communication issues, and time management. In summary, all research questions have been answered and the objectives of this research therefore achieved.

To learn about digital platforms and enhance teacher-student communication, teachers need proper training and coaching. Institutions and teachers need to concentrate more on training on the technological platforms. It is important to scale up digitisation, hybridisation, and ubiquitous learning, and to learn from our mistakes (Vanpetch & Sattayathamrongthian, 2020). Although online courses are not as effective as in-person courses, they are still preferable to no classes at all (Leob, 2020). This is a useful experience for educational institutions, government, and educators who need to stay relevant with technology in order

to meet potential challenges in the future. Additionally, by failing to use the technology effectively teachers can demotivate students and reduce their ability to constantly engage with the lessons.

In a nutshell, some teachers supported the idea that e-learning or ODL would be an excellent replacement for teaching during the MCO, but they acknowledged that it still could not replace the traditional classroom setting, which offered a more personalised learning environment typical of face-to-face interaction. One of the most important findings of the study was that despite the teachers' best efforts, developing educational tools was difficult due to poor student discipline and attitude, as well as having a lack of resources and amenities. It appears that government intervention is required to ensure that no student is abandoned when considering using online teaching platforms such as Google Classroom. The availability of the Internet and technology needs to be improved because it is essential to the operation of Google Classroom and other teaching platforms.

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