

Medium and the Effects of Online Learning (ODL) During Covid-19 Pandemic

Ardini Binti Osman¹, Erisna Elyssa Binti Hassan², Fahim Naqibah Binti Ismail³, Fatin Hadirah Binti Mohd Hasri⁴, Nur Aina Syakira Bt Samsul Bahari⁵, Nur Aimi Ayuni Mohd Rafi⁶, Nor Aisya Batrisyia Binti Mohd Norawi⁷, Syafiqah Binti Mohamad Huseini⁸, Izzah Nur Aida Binti Zur Raffar⁹

Universiti Teknologi MARA, Melaka Branch, Alor Gajah Campus, 78000 Alor Gajah, Melaka, Malaysia

Email: ¹osmanardini@gmail.com, ²erisnaelyssa@gmail.com, ³fhmnbqhb@gmail.com, ⁴fatinhadirah02@gmail.com, ⁵ainasykira@gmail.com, ⁶nuraimiyuni12@gmail.com, ⁷aisya10batrisyia@gmail.com, ⁸syafiqahmdhuseini@gmail.com, ⁹izzahnur@uitm.edu.my (Corresponding Author)

Abstract

The Covid-19 pandemic has changed the way people live today, including in the field of teaching and learning. Learning in this pandemic era can be seen as a way to nurture a creative and innovative generation. Therefore, this study is conducted to examine the medium of online learning and teaching in the pandemic era, identify the impact of online learning in the pandemic era and analyze the challenges of online teaching and learning in the pandemic era. This study is qualitative in nature by using document analysis to obtain the data and information to be targeted. The results of the study show that the medium of teaching and learning to meet the needs of online PdP learning is through the Google Classroom, Google Meet and Telegram platforms. There are positive and negative effects when running the online teaching process. Therefore, studies suggest that early stage exposure to appropriate education and training should be given to educators and students so that efficient use of technology in online learning will have a positive impact on the goals the government towards the digitization of education.

Keywords: Medium, Effect, Pandemic, Online Teaching and Learning (ODL)

Introduction

The existence and transmission of the Covid-19 virus outbreak that began in Wuhan, China has given a big impact and impression to all the people in Malaysia has also given a new perspective on the implementation of education through the internet medium. The Covid-19 pandemic has greatly changed the way of life of human life today. Most lecturers and teachers have started to try and use various technologies and mediums to communicate with students from all over the country. If examined more deeply, the method of virtual learning is one of the effective alternatives in learning and is newly realized by educators and students. By using

this internet medium, knowledge can still be conveyed to students even without the need to meet face to face. If there are questions about things they don't understand, students can ask their teachers with just one click.

The good thing that can be taken from the implementation of the Movement Control Order (MCO) is that the teacher group can see how significant it is in utilizing technology to educate students in a period of time when the world is undergoing Movement Control Order (MCO) where all of them cannot go out. The interest and inclination of educators to be involved in module development, delivery and measurement of students online has increased dramatically and can be seen as very encouraging. This development is a positive thing than the Covid-19 pandemic is experiencing. It will have a greater impact if the student continues to leave the Teaching and Learning process and will also have a dominant impact on other matters such as management, examinations, awards, finance and various other aspects that are outside the context of curriculum and syllabus.

Online learning requires a high level of student motivation and discipline, as well as active and self-directed learning. However, not all students have the skills and habits to learn on their own as some students only So this is a major factor that makes it difficult to stay motivated during online learning. Therefore, self-learning elements should be used in all courses. Teachers especially instructors should take a combined approach. For example, by providing interactive materials and teaching practices that are aligned with self-learning skills. Universities also need to set clear objectives when assessing learning outcomes to ensure that Program Learning Outcomes (PLOs) and Course Learning Outcomes (CLOs) are achieved. Educators must emphasize their ability and capability to teach online in line with the new norms that have been implemented.

The country's higher education sector is currently undergoing a paradigm shift in producing a generation that has IT skills. The new norm requires students to be committed to using new learning methods that are based on current technological developments. The availability of technology has successfully integrated text, audio, video and multimedia learning. Learning in this pandemic era can be seen as a way to nurture a creative and innovative generation. This is in line with the philosophy that emphasizes lifelong learning. Indirectly, students can prepare themselves by applying and refining the use of technology to face the challenges of the Industrial Revolution 4.0. It can indirectly increase the marketability of students in line with the current needs of the industry. So it can be concluded that implementing new norms during this pandemic era requires a joint effort. Students and teachers need to work together in waves to truly utilize this online learning (ODL) mode. Thus, this study was conducted to achieve the following objectives:

1. To examine the online learning and teaching medium of the pandemic era.
2. To identify the impact of online learning in the pandemic era.
3. To analyze the challenges of online teaching and learning in the pandemic era..

Medium of Learning and Teaching Online During Pandemic

The global crisis caused by the spread of the COVID-19 epidemic not only affected the economic sector, but also the higher education sector. Once the Malaysian Government declares the Movement Control Order (MCO) which has been issued as of March 18, 2020, The Ministry of Higher Education (KPT) has asked all universities to enable Teaching and Learning mode (PdP) online and on the recommendation that all public universities have conducted teaching and learning sessions online fully for the first quarter of the 2020/2021

session. This creates a traditional teaching structure that is initially college-shaped and will face-to-face the new teaching and learning norms (PdP) which is virtual and online.

Over the years, this has certainly given a great blow to educators and students across Malaysia to begin to adapt to this new teaching norm. As a result, it requires skills and knowledge to use virtual mediums as a medium of teaching and learning. However, this is necessary to ensure that no classes are held face-to-face so that the spread of the Covid-19 outbreak in schools and institutions of study is avoided and to ensure that students are better engaged in learning and survived the Covid-19 pandemic era in Malaysia. Therefore, there are several commonly used teaching and learning mediums and teachers and students' choice following easy access applications and providing a variety of functions that meet the needs of teachers and students for PdP learning online including Google Classroom, Google Meet and Telegram mediums.

First and foremost, Google Classroom medium. According to Khan (2014) states that the Google Classroom medium was launched by Google and is available to all educational users beginning August 12, 2014. However, this medium was widely used in Malaysia during the implementation of online learning and teaching in mid-2020. Next, Kekanda (2022) explains that Google Classroom medium is a free web service developed by Google, aims to help shape more efficient virtual learning by facilitating and distributing online assignments. Not only that, this medium is also easy to access. This is due to the entry of their class files, students can participate in the access code provided by their subject teacher acting as administrator, or automatically imported from school access.

In addition, Google Classroom is also able to help streamline the process of creating and sharing files between teachers and students in their respective Google drive users, where students can take pictures and submit their assignments for better and faster subject teachers. Not only that, this medium can also help spread the announcement of classroom information, assign and assess, have a distribution system and be efficient in maintaining a record of teaching and learning. In fact, teachers can also follow and monitor every student improvement, and evaluate assignments that are sent and respond to their students. As a result, according to sources Nurhidayah (2020), Malaysia recorded the world's first position in the Google Classroom phrase search on April 17, 2020. This has proven that teachers and students have a higher tendency to show interest in using this online teaching and learning medium throughout the duration of the Movement Control Order (PKP) during the crisis Covid-19 outbreak.

The next medium is the Google Meet medium that offers online video conferencing services. This medium is one of Google's company-created products. In addition, the services offered by this medium also allow its users to make video calls to stay in touch with family members, colleagues and other communities in one screen regardless of distance and time zone and real-time use. Based on the Parada (2021) it stated that initially the Google Meet medium launched in February 2017 was intended only as an enterprise version for another application, Hangouts and allowed the maximum number of participants in Google Meet at one time only 30 people.

However, this changed in March 2020, where Google Meet began to receive a warm welcome with 200,000,000 (two hundred million) daily users worldwide due to the implementation of online learning and teaching during the Covid-19 pandemic. Not only that, at the beginning of the first launch, Parada (2021) further stated that a Google Business or G Suite account is required to obtain this medium access, but following high demand from the public on March 2020, Google is planning to continue to popularize it and make it accessible

to its users. As a result, Google Meet now can accommodate more than 400 participants at a time. As the Covid-19 pandemic has not fully recovered, there are still many teachers and students who use the Google Meet medium in the PdP process following its simple use and can help channel the learning information process well and innovatively. In addition, this medium has some great features such as the size of internet data released in small capacity. According to Khairi (2021), this medium can also track students' presence, question-and-answer sessions and noise cancellations in the environment while using Google Meet medium. Finally, Rifda (2022) has stated that, the use of this Google Meet medium will be in conjunction with the Google Classroom medium to streamline the process of presenting and receiving learning information during this pandemic.

In addition, the Telegram medium is also a concern when it comes to the success of education management now because it has a practical, simple communication system, simple to understand how it is used and does not have ad space that can interfere with the Telegram medium usage process. Even, the frequency of using this medium for personal matters also helps students tend to have further discussions with their classmates and teachers to discuss some of the things they didn't understand during class before this. Furthermore, Shariffah Khairiah et al (2019) think this application is in line with PdP's requirements online as it is easy to send messages, share college notes, and are accessible from a variety of technologies such as mobile phones and laptops without the need for a large internet connection. One by one, the Telegram application also helps save data space on mobile or even laptops because the data obtained from the Telegram will be stored in the cloud server and will not be stored directly unless its users download the data. However, this medium can still receive large documents up to 1.5GB. Of course, this feature is great because students can view the notes and assignments provided by their teachers without worrying about the use of data and storage to view learning content in many forms such as text, documents, pictures, audio and video.

Not only that, according to Zulkurnain et al (2021), Another special feature of this Telegram medium is that users can store messages or anything important on saved messages. This directly enables its users to send them all to themselves for future use. In addition, this medium also guarantees a faster, easier and safer data transfer process than email usage. Finally, the management of the Telegram medium is also seen as constantly improving the renewal of their medium facilities over time as they are constantly informed of any changes or functions of the medium.

Effect of Online Learning and Teaching During Pandemic

The COVID-19 pandemic has forced and urged educators in all institutions both in schools and universities to use a rather unfamiliar medium of teaching at first, namely online. Online teaching indirectly has both positive and negative impacts on teachers who try to convey knowledge under any circumstances.

The positive effect that can be recognised from online learning and teaching (PdP) to teachers is that teachers can increase their knowledge and mastery and skills related to technology. There are many applications that can be used by teachers to attract students so that they are not bored using the same PdP method. Teachers need to master how to use these applications first before exposing them to students. Platforms such as Kahoot, Google Meet, Google Classroom, Quizizz and Youtube have their own benefits when used in the classroom. For example, the Google Meet platform allows teachers to conduct PdP just like in school, example by lighting up and being able to receive student responses at that time.

Therefore, teachers can create question and answer sessions with students where students can ask questions that they don't understand and teachers will continue to provide answers immediately. Whereas, platforms like Kahoot and Quizizz allow teachers to provide questions and upload them during PdP time according to a predetermined schedule. These platforms have their own and different ways of delivering the information that the teacher wants to convey.

In addition, teachers being able to develop their creativity in producing learning materials during the pandemic is a positive impact for teachers during the pandemic for learning and teaching (PdP). This is because there are teachers who create their module materials and make them into printed copies as well as digital copies. Therefore, all important and relevant information can be expressed on self-made module materials so that students can easily understand the information conveyed by the teacher. For example, teachers explain the subject matter by using mind maps during the online learning and teaching (PdP) period by using their own handwork or using platforms that can produce very attractive mind maps such as Canva, Microsoft PowerPoint, Goggle, MindMup, SimpleMind, Lucidchart and so on. Indirectly, teachers can pry out new talents that they may not have known about before. In addition, students will also be more interested in listening to the information delivered by teachers because the modules that have been provided can attract students' attention to find out more about their subject matter.

Besides, this online PdP method can be done anywhere and at any time while having internet network coverage. Teachers can still run PdP classes as usual if there are unavoidable problems, this is because teachers can still access the internet and can upload PdP materials on the corresponding platform. For example, a teacher who is affected by COVID-19 and quarantined at a designated quarantine centre can still conduct PdP at that quarantine centre because there is an internet connection there and it allows the teacher to conduct PdP activities online. Platforms such as Google Classroom allow teachers to share PdP materials either in the form of slides, questions or video recordings. Teachers can make teaching video recordings in advance and upload them at the PdP time according to a predetermined schedule. So with that, students can still gain knowledge and not miss subjects.

Furthermore, there are also negative effects that teachers need to deal with during learning and teaching (PdP) during the pandemic season. Among them is that teachers are not able to monitor the behaviour of their students like before the pandemic caused by COVID-19. This has led to teachers not being able to recognise the development of their students better. Before the pandemic, teachers could see every movement of their students when they were teaching such as writing notes, focusing fully on learning and asking questions about questions they did not understand. When the pandemic is in effect, teachers cannot know what their students are doing behind their mobile devices such as laptops, smartphones, iPads, tablets and many more. Maybe the students do not hear the information conveyed by their teachers when the teachers are teaching by doing things that are not useful. To conclude, playing mobile games on smartphones, sleeping, not focusing on the knowledge conveyed by the teacher, not responding if the teachers ask questions and not recording important notes conveyed by the teachers. Therefore, the attitude of respect for teachers in students is fading.

The next negative effect that teachers experience is that the two-way conversation between teacher and learner does not run smoothly. This has made learning on this line difficult or unable to be implemented properly. If the teacher teaches and asks a question and the student does not reply or answer the question then it is no longer considered a two-way

conversation and the teacher cannot know the level of understanding of the student. If the teacher uses a platform like YouTube as well, the teacher will get feedback from the student not immediately. This situation hinders the learning objectives from being achieved and also makes it difficult for the teacher to interact with the students.

Moreover, the burden experienced by teachers is also increasing due to COVID-19. Teachers need to understand the situation of their students who have internet network constraints. Among others, for students who live in rural areas where it is difficult to receive signals for internet networks. Not to forget, there are a handful of students who do not have smartphones or devices to study online, especially for the B40 group. In the past, before the pandemic, teachers did not have to think about this because the teachers and students would be in the same area, namely in the classroom. The teachers can teach the subjects without any distraction from any unrelated matters. But now, teachers need to find stimulating methods for students due to online learning and teaching (PdP). Therefore, the burden faced by each teacher is increasing because they need to find new alternatives so that their students will not be left behind in the subject.

The Challenges of Learning and Teaching Online During Pandemic

The worldwide transmission of the COVID-19 outbreak caused all sectors to shut down including the education sector. As a result, the process of learning and teaching in person was forced to stop during the period of the movement control order (MCO). Teachers began to take other alternatives to run classes online to ensure that all students would not miss out on learning during the period of the Movement Control Order (MCO). However, various problems arise when trying to implement the online learning method. There are several challenges that have been identified based on the studies that have been done.

Among the challenges that can be identified are the level of internet accessibility and the stability of the learning platform. This is one of the most important aspects in controlling online classes. The online classroom can be run well if a teacher can determine what learning method is appropriate when the internet accessibility level has been identified for each student in the classroom. However, there are some constraints that exist especially for students who live in out-of-town areas and do not have a stable internet connection. For example, there are students who need to go to the trouble of climbing a hill just to find an internet connection in order to get into the classroom. In addition, these students can be contacted using other mediums such as Whatsapp, Telegram or Messenger. In case, this method is also not usable the teacher can use the traditional method of sending the teaching materials to the students. This is to ensure that no student will be left behind in the teaching tribe despite the many obstacles that need to be faced.

The second challenge is the management of emotions. The long duration of PKP is not only emotionally draining for students but also for teachers. This is due to the difference in the way of teaching and learning face-to-face to online learning that happens immediately. An educator's motivation must be taken seriously when responding to online PdPR challenges with students. This is because there are many difficulties that need to be overcome such as the difficulty in generating two-way conversations between students. The theory of relationship regulation developed by Lakey & Orehek (2011) states that social support received or given continuously can increase a person's level of mental well-being. When a person is wise in controlling emotions, thoughts and behaviours through effective communication, it can put the individual's mental well-being in a good state. In addition, this theory explains how the connection and support of the surrounding people can reduce one's

stress (Lahey & Orehek, 2011). Therefore, this theory is seen to explain how social support obtained from friends, parents, family, significant individuals and the students themselves and can attract teachers to online teaching.

The next challenge is that teachers need to familiarise themselves with the progress of the modernisation era especially in using increasingly modern tools during the teaching process. Therefore, teachers need to use the right techniques to produce teaching materials that are easily understood by students. The level of student thinking at this stage still requires teaching materials that are concise and easy to follow because there is no guidance from the teacher. The various duties of a teacher need to be understood and lived. This is because the teacher is also an ordinary human being who certainly will not run away from various life problems. A teacher also needs support and motivation in carrying out his or her true duties as an educator. Adjustments to methods, strategies and approaches can effectively influence online teaching routines.

Conclusion

The conclusion of this study is that there are various facilities and technological advances that go along with the circulation of the times that can be applied in the field of education. Technology really changes life from era to era and there is no reason to do anything because all information is already at the tip of the finger. With just one click, you can access thousands or even millions of information from various aspects. Among the teaching and learning mediums that have become the choice of many because of applications that are easy to access and have efficient functions to meet the needs of online PdP learning are the Google Classroom, Google Meet and Telegram platforms.

There are also some positive and negative effects when running the teaching process online. Among the positive effects are that teachers can improve their mastery of digital technology skills, teachers can develop their creativity and online learning can be done anywhere and at any time according to suitability. However, there are also negative impacts when carrying out online teaching, namely teachers cannot monitor the behaviour of students, two-way conversations between students and teachers are not as expected and the workload of teachers is increasing. Therefore, the ability to manage emotions well by teachers really needs to be emphasised to avoid the pressure of the workload deck even if allowed to continue can damage health.

Although online teaching seems interesting and flexible, there are also some challenges faced by the teaching staff. Among the challenges are the ability to reach the internet and the stability of the study platform, emotional management and efficiency in controlling modern equipment. The implementation of online learning can be optimised if the technological facilities function well. In addition, exposure to the appropriate initial level of education and training needs to be given to the teaching staff and students. The efficient use of technology in online learning will have a good effect in line with the government's goal towards the digitisation of education.

Therefore, studies suggest that early stage exposure to appropriate education and training should be given to educators and students so that efficient use of technology in online learning will have a positive impact on the goals the government towards the digitization of education. For example, platforms such as Kahoot, Google Meet, Google Classroom, Quizizz and Youtube have their own benefits when used in the classroom. Also, platforms that can produce very attractive mind maps such as Canva, Microsoft PowerPoint, Goggle, MindMup, SimpleMind, Lucidchart and so on. This study gives significance to the field of education in

empowering educators' efforts towards student excellence despite facing the challenges of the pandemic.

Acknowledgment

This project is funded under the Teja Grant (GDT2022/1-6), Universiti Teknologi MARA (UiTM), Melaka Branch. The highest appreciation to Universiti Teknologi MARA (UiTM), Melaka Branch for the assistance given to this project.

Corresponding Author

Izzah Nur Aida Binti ZurRaffar

Academy of Contemporary Islamic Studies (ACIS), Universiti Teknologi MARA, Melaka Branch, Alor Gajah Campus, 78000 Alor Gajah Melaka, Malaysia.

Email: izzahnur@uitm.edu.my

References

- Kekanda, M. (2022). *Apa Itu Google Classroom? (Cara Guna & Kelebihan)*. <https://kekandamemey.com/apa-itu-google-classroom.html>.
- Khan, J. (2014). *Google Classroom now available to all Apps for Education users, adds collaboration features*. <https://9to5google.com/2014/08/12/google-classroom-now-available-to-all-apps-for-education-users-adds-collaboration-features/>
- Khairi, M. Y. (2021). *5 fungsi baharu Google Meet yang sangat memudahkan kerja, cikgu-cikgu mesti cuba!*. <https://sinarbestari.sinarharian.com.my/gen-z/5-fungsi-baharu-google-meet-yang-sangat-memudahkan-kerja-cikgu-cikgu-mesti-cuba/>
- Lakey, B., & Orehek, E. (2011). Relational regulation theory: A new approach to explain the link between perceived social support and mental health. *Psychological Review*, 118 (3), 482–495.
- Nurhidayah, H. (2020). Carian 'Google Classroom' di Malaysia tertinggi di dunia. *Sinar Harian*, 17 April.
- Parada, C. (2021). *Siapa yang membuat Google Meet?*. <https://paradacreativa.es/ms/quien-creo-google-meet/>
- Rifda, A. (2022). *Mengenal Sejarah Google dan Produk-produknya*. Gramedia Literasi. <https://www.gramedia.com/literasi/sejarah-google/>
- Khairiah, S. T. K. T., Mahzan, A. M., Razaq, A. A. (2019). *The Relationship between Telegram Application as a History Learning Platform and Student Performance*. *Social Sciences, Education and Humanities (GCSSEH)* 2 (1): 50-60.
- Zulkurnain, H., Asrul, A. M. M., Norazlina, M. (2021). *Analisis Penerimaan Penggunaan Aplikasi Telegram Bagi Modul Latihan Penyediaan Asas (SPU 1033) Di Kolej Komuniti Kota Marudu, Sabah*. *International Journal of Humanities Technology and Civilization (IJHTC)* 10 (1): 23-36.