

Implementation of Virtual Teaching During The COVID-19 Pandemic: Challenges and Recommendation

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ABSTRACT

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Virtual learning is implemented in various countries as solution to make education functional during the Covid-19 pandemic. However, there a lot of challenges that faced by the teachers. Suddenly change of teaching method make the task a lot difficult for teachers to adapt. The purpose of this study is to learn teachers' challenges in implementing virtual teaching they faced and the technology they used during the COVID-19 pandemic era. This study used a qualitative library research design, and all the data were collected using the World Wide Web. The first and the most important findings about teachers' challenges in implementing virtual teaching using technology are lack of skills, time management, and the negative attitude of teachers. The findings reveal that, most of the teachers are not prepared for virtual teaching as they are not being well trained to do the job. It can be certainly suggested that teachers are not comfortable with the abrupt changes from traditional teaching methods to technology-based teaching methods.

Contribution/Originality: This study contributes to the existing literature to a different perspective about virtual teaching. The significant contribution of this study is to propose new ideas on the challenges and recommendation of virtual teaching.

1. Introduction

The Coronavirus disease (COVID-19) was declared a global pandemic in March, 2020. Many places implemented Movement Control Order (MCO) to contain the problem. Preventive measures have been taken by countries against the spread of COVID-19 by the closure of schools and universities which affected more than 1 billion students around the world. The entire education systems in the world try to beat COVID-19 and find ways to continue education for students during the pandemic. However, the implication of COVID-19 has stressed out the issues of management of teaching and learning processes worldwide. Thus, technology surely can assist this issue without a doubt. In the sense of that, ministries of education in most countries have recommended or made it mandatory to implement online learning at all school levels and higher

learning institutions. UNESCO (United Nations Educational, Scientific and Cultural Organization) proposed virtual learning programmes and the use of various educational applications to allow teachers to provide classes to their students remotely. This decision by most countries has been supported by UNESCO. In addition, UNESCO also provides free platforms and education resources to be used for online learning.

The rapid progress of technology such as personal computers and laptops have transformed the entire world in many aspects of life. Up to this point, people around the world, interacting and sharing their ideas across the regions by using technology. The use of technology can be considered as the most appropriate alternative to keep education functional.

Virtual Teaching (VT) is teaching by utilizing technology related aspects of teaching and the internet, and outside educational facilities. In general, VT takes place in an online environment. Teachers and students are physically separate in terms of time, place, or both. Sometimes, teachers and students can complement each other in terms of time management. Although there are challenges and limitations in implementing virtual teaching and learning, it is also the best opportunity for rapid progress in the field of digital education. The move from traditional teaching to virtual teaching and learning, may enhance both parties, teachers and students, to become more creative.

2. Literature Review

Online or virtual teaching is a teaching process which is no involvement of physical participation of teachers. According to [Sanford \(2020\)](#), students and teachers can be located at any places at the time of teaching and learning process, both parties will be separated in terms of places.

Teaching and learning process is totally generates a creative and conducive learning environment by using ICT. ICT is not only considered as a tool but also as a supporter of new ways in the teaching and learning process. Multimedia in education may attracts students in their learning process as it will be more effective to gain students attention and easier to understand the content ([Plamen & Rodgers, 2003](#)).

The information revolution that has taken place due to the advancement of ICT presents new challenges to the teaching profession; these advances need to be harnessed to enhance the prestige of the teaching profession which is undergoing 21st century changes ([Ward & Peppard, 2003](#)).

Another challenge is also faced when there is a lack of ICT skills in accessing DELima, Zoom, Google Meet and various PdPR methods among students or parents. This causes teachers to focus more time in teaching students the use of ICT. If the student is not explained about the procedures for using ICT. Students' motivation will decrease to implement PdPR.

Low internet coverage where students live give a problem to teachers in order to teach their students. The problem lack of equipment of these devices as well as unstable internet access affect the PdPR process to be implemented properly. Teachers cannot deliver their teaching if students are not able to 'attend' virtual class properly.

To overcome this problem, some countries have taken proactive steps by distributing devices to classes and increasing access to lines. In Finland and several states in China, their students are allowed to borrow digital devices from the school to facilitate students to access online learning platforms. In a study conducted by [Hapini et al. \(2020\)](#) stated past studies have revealed that most developing countries face similar problems in implementing ICT in schools. In addition, among other issues that are often highlighted are issues such as shortcomings and weaknesses in aspects of physical facilities, support and maintenance.

Nowadays, many teachers have too much clerical work to focus on rather than put all their effort on teaching and improve their ICT skills. With all the focus fall on the wrong side of responsibility with a lot of their time to work on such as holding a lot of position in school or in community. Therefore, they cannot spend much time to use ICT facilities in the teaching process.

In today's technological development, teachers need to accept changes in teaching and learning evolvments. In this study, teacher acceptance refers to the willingness of the level of ICT use based on ICT skills mastered by teachers in teaching and learning. A study conducted by [Zulkifli and Raja Maznah \(1994\)](#) found that teachers' positive attitude is the most important aspects in motivating students. Therefore, attitude and awareness are the best ways to anticipate and predict commitment to computer use. The attitude and confidence as well as the high effectiveness of teachers can help facilitate the process of increasing the acceptance of use in the implementation of ICT during the teaching and learning process in the classroom.

Teachers' perceptions also play an important role in determining a positive attitude towards the acceptance and use of ICT in teaching and learning. Findings show that teachers' perceptions and attitudes can change if teachers are given training or ICT courses. The findings of the study show that most teachers are positive about the importance of using ICT as a teaching and learning tool. Meanwhile, [Levin and Wadmany \(2006\)](#) have studied teachers' perceptions and practices in the use of ICT in the classroom. The findings of their study show that teachers' perceptions begin to change when they use ICT in the classroom. Perceptions change from negative to positive may turn teachers feel more confident using ICT in the classroom.

3. Discussion

3.1. Challenges and Limitation

3.1.1. Lack of Skills

Most teachers are forced to switch to VT almost abruptly with no training or resources. Most of them must employ a variety of e-learning tools, making the entire process intimidating. They are expected to interact with students digitally, handle large amounts of information, and plan their teaching method. Most spend up to ten hours a day carrying out teaching methods such as cleaning up messes, simplifying procedures, and influencing learning which is stressful.

Because pedagogical guidelines for virtual education differ from those for traditional classroom teaching. Adequate time is advised to acquire both the technology and pedagogical strategies to improve the classroom experience for both students and

teachers (Roth et al., 2020). Traditional classroom teaching is more hands-on approach which teachers will heavily involve in their teaching. While using technology and pedagogical approach, teachers could be anywhere and not limited to be in front of the students physically.

Teachers' abilities develop as their experience grows and their expectations shift as a result (Hashweh, 2003). After two years of online teaching, differences in expectations for teachers' challenges, information flows, and activity selection were statistically significant. Higher levels of expectations are associated with more perceived hurdles among new teachers (Parson et al., 2017).

Teachers with less online teaching experience perceive higher possible difficulties when teaching, and this increased degree of predicted issues was visible during early stages of establishing experience for online teaching. (i.e: one semester to two years).

3.1.2. Time Management

In fact, even teachers who had previously used online teaching tools for blended learning said that creating online classes took a long time just to prepare for it.

Teachers have time restrictions when doing their online teaching and learning. Most teachers spend 2 – 3 hours preparing the materials which is extra time needed for them to deliver their teaching. This problem developed because teachers were unfamiliar with the online teaching platform (Zhang et al., 2020; Zhou, Wu, Zhou & Li, 2020) and how to find resources that fit the national curriculum. Furthermore, teaching from home during school day and nursery closure increased parental responsibility for some teachers, since time management was a major difficulty for them.

It is necessary to comprehend the many forms of interactions between teachers, students, and technologies (Honey et al., 2000). Teachers play a big role to integrate technology in the classroom and make it part of teaching and learning process. Benefits of online teaching confidence were emphasized in a survey conducted by Barton and Haydn (2006) which acknowledged the relevance of competence using information and digital technologies.

3.1.3. The Negative Attitude Towards Virtual Teaching

The teachers faced several challenges, including a lack of consistent internet connectivity and digital infrastructure, as well as disciplinary conflicts (Sari & Nayir, 2020). Fatoni et al. (2020), teachers encountered many obstacles while conducting virtual teaching during the COVID-19 epidemic, including an inconsistent network connection, synchrony of teachers' voice and teachings, inability to attend classes due to a shortage of internet access, and students' lack of concentration. They lacked knowledge and skills necessary to turn offline materials (hardcopy) into online materials (softcopy) and distribute them on online platforms. Teachers' lack of expertise with the platform that has been used during teaching and learning through virtual because they had relatively little experience using online platforms to teach before pandemic. This will lead to negative perception towards VT.

As well as that, challenges to teachers in organizing and designing engaging activities that engage their students to join online classes. It is obvious that online teaching

necessitates a special set of skill in terms of how to teach, how and when to employ synchronous, asynchronous or both teaching styles, lesson planning and design, getting feedback and reflecting on lesson delivered (Martin, Budhrani, Kumar, & Ritzhaupt, 2019). Many teachers wasted a lot of time groping in the dark as they were suddenly asked to learn new abilities after never having attempted to use an internet platform in their teaching and learning.

4. Recommendation

4.1. Improving Digital Pedagogical Methodology

The COVID-19 pandemic put both teachers and students in a very unfamiliar territory. Both teachers and students need to adopt technology to keep their teaching and learning back on track. The adoption of technology came with a lot of challenges and issues. It was directly related to lack of knowledge and skills to use the technology by students and teachers. Teachers did have so many issues such as difficulty finding and selecting a suitable platform for online class, cost of the license and issues of unavailability of the Internet in remote areas. Most of the teachers do not have a good knowledge about differentiated teaching and learning. It is because teachers are not familiar as they are not properly exposed to the new teaching methods.

These issues need to be address as education technology evolves in a very fast pace which needed to improve in a lot of areas. The basic infrastructure to generate stable Internet coverage in remote areas is needed. Besides, it may give an equal and fair education to every student in the country. To overcome this imbalance, some proactive approach had done by some countries by distributing devices to and improve internet access to students.

Digital pedagogy needs to be improved. Every aspect of digital pedagogy must make it easier for teachers to access. Setup a good teaching platform and training for teachers to integrate conventional teaching with technology-based teaching. It will improve students' achievement much better with a different learning experience. Students may learn a lot of contexts in learning.

4.2. Strengthening Resilience in Schools

The word resilience can be defined as ability to gain successful outcome although being in a challenging period (Masten et al., 1990). School authorities, teachers and Parents-Teachers Association are back-bone of for the strengthening resilience among students.

Teachers and school authorities need to be promoting resilience among students' community during difficult time of pandemic. Besides, it can enhance strong bond between students and teachers. This explained that has indirectly established a stronger relationship between teachers and parents than before.

Through research, challenging factors of parents faced in terms of providing materials, knowledge, skills and family management. In order to ensure the continuation of the children's' education to get an equal education, parents need to prepare adequate needs for their children. In addition, parents need to monitor their children progress while implementing online classes. Nor Hidayati (2020) stated that, during MCO, it gives parents extent time and space to be together in in helping their children's learning. This

indirectly means parents need to step-up and improve their technological skills in the use of technology.

4.3. Teaching Technology Training Should be Customized to the Audience

Teaching technology training need to be conducted to all teachers. This training is needed as teachers need to have a variety of teaching techniques to attract students in their class. Previously there were some trainings related to technology offered to teachers, but critics of these training are too easy or too technical. The objectives were not achieved even there were so much cost involved and wasted.

Training needs to be customized according to the teachers' needed. The design of the training must be more realistic to the current situation.

5. Conclusion

The COVID-19 pandemic has served as a catalyst in Malaysia's education system. The whole school system is ready to transition from classroom to virtual learning. This pandemic has provided a chance for educators to use information technology into their teaching methods.

New learning methods will need time to adapt and mastered. It's not an easy task for teachers to switch from one method to another. Teachers need time to acquire new skills set. For some teachers, providing online classes is a significant difficulty because they have been used to conducting classroom experience for so many years.

The educational institution's administration should allow teachers to receive sufficient training on educational software so that they may effectively and efficiently educate and advise students.

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Conflict of Interests

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