ISSUES AND CHALLENGES FROM TEACHERS' PERCEPTIONS IN CREATING ONLINE LEARNING IN THE MIDST OF COVID-19 PANDEMIC

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ABSTRACT

The outbreak of the Corona virus during the month of December 2019 spread to various parts of the planet in a few months brought our lives to a halt. Along with the extreme health crisis faced by COVID-19, the education sector was severely impacted. This study explores the perceptions of secondary school teachers of online learning in a program developed in Malaysia during the COVID-19 Pandemic. A quantitative survey was conducted to evaluate teachers' perceptions of teaching and learning engagement. Data have been obtained by a questionnaire. Learning materials used in university student education are also accessible online. The nature of the new technology interweaves formal and informal learning such that students can participate actively in the use of ICT to learn. Otherwise, the teachers will come to a halt a handful of students behind their students, partially because their particular learning style has not been triggered without understanding these various learning methods. Consequently, this survey explored the teachers' understanding of teaching and their relationship with their engagement to learning. Broadly, the success of online learning in Malaysia during the COVID-19 Pandemic was determined by the readiness of technology in line with the national humanist curriculum, support and collaboration from all stakeholders, including government, schools, teachers, parents and the community. The findings indicate that students have a good sense of teaching and there have been strong correlations between the teacher's perceptions and students' engagement to learning. Teachers are recommended to consider the nature of the student and to apply appropriate types of learning tools during their classes.

Keywords: *COVID-19, Education, ICT, Online Learning, University*

1. INTRODUCTION

The pandemic has an impact not only on human life but also on education. On its impact on education, the least was expected. COVID-19, like many other aspects of daily life, has undoubtedly had a major influence on students, teachers, and educational organizations all over the world (Mailizar et al., 2020). According to Sunitha et al. (2020), the ongoing COVID -19 pandemic started in December 2019 in Wuhan, China, and was declared a pandemic by WHO on March 11, 2020. The educational sector was caught by surprise when the tragic event shook the sector towards its core (Anna, 2020). According to a UNESCO estimate, by June 2nd, 2020, nearly 1.2 billion children and youth will face unprecedented instability in education around the world, and more than 200 million students in higher education institutions will be excluded from their institutions UNESCO (2020). Some of the World Health Organization's (2019) recommended principles, such as social and physical distancing, have made implementation difficult for each country. As the COVID-19 pandemic spreads, there has been an increasing shift toward online education due to the indefinite shutdown of schools, colleges, and universities as the only alternative left (Martinez,2020). Schools are being forced to introduce distance education or online learning, e-learning, distance education, correspondence education, external studies, flexible learning, and wide-open online courses as a result of changes in learning systems MOOCs (Rasmitadila et al., 2020). According to the Centers

for Disease Control and Prevention, e-learning plans, including digital and distance learning options, have been introduced as feasible and necessary to ensure students' educational continuity during the COVID-19 pandemic. According to a World Bank report (2020), many countries have adopted various learning programs as a result of COVID-19 closing physical schools. China, for example, launched an online learning system in early February 2020 by conducting simultaneous online learning activities to ensure that students' learning was not interrupted. According to a UNESCO, the lockdown affected over 87 percent of the world's student population from more than 160 countries (Araujo et al., 2020). This unprecedented crisis in Malaysia has created an opportunity to boost online education for nearly 5 million school students and 1.2 million university students (Abdullah et al., 2020). The coronavirus is upending life (EdSource, 2020), posing an ongoing danger to our educational institutions from kindergarten to tertiary level and exacerbating the teaching-learning process day by day. Aside from philanthropic activities, some people hoped to turn their entrepreneurial talents into profit-making opportunities (Lokanath et al., 2020).

2. ONLINE LEARNING

The use of online learning is evidence of the industrial revolution 4.0, in which access to information is unlimited, allowing for the use of online or distance learning. Students can be anywhere (independent) in these environments to learn and communicate with teachers and other students (Singh & Thurman, 2019). Effective online education includes online teaching and learning, as well as the development of many academic works, concepts, prototypes, hypotheses, ethics, and the evaluation of benchmark concentrations on quality online course design, teaching, and learning (Hodges et al., 2020; Bozkurt & Sharma, 2020). Online learning has benefits such as flexibility (Smedley, 2010), interactivity (Leszczyski et al., 2018; Wagner et al., 2008), self-pacing (Amer, 2007), and opportunities. The disclosure of COVID – 19 saw an increase in the popularity of information technology. The novel pandemic has made distance learning mandatory, pressuring schools and universities to establish an immediate learning environment in a setting distinct from conventional classrooms and to rapidly adopt unprecedented strategies in their efforts to make distance education possible (Yassine, 2021). The majority of educational institutions have resorted to online teaching and learning. The rapid transition from face-to-face or traditional classroom interaction to online interaction between teacher and learner presented numerous challenges (Anna, 2020). School education provides vital education, and when children and young adults leave school, their prospects for development and advancement are lost. These restrictions are extreme for disadvantaged students who continue to have less educational opportunities outside of school (UNESCO, 2020). The flourishing innovative technologies and learning management systems for teaching, learning, and assessment have made progress by providing a working solution for educators and allowing policymakers to implement the use of information technology during this period for covering course work (Abbasi et al., 2020). Some teachers are concerned about the differences in student performance in conventional and online environments (Tadd & Richard, 2019). Furthermore, the shift from face-to-face to more indirect teaching approaches has required schools to participate in a dynamic and limited learning flow. There is a diverse range of programs available through online education. It is easily accessible; one can study or teach from anywhere in the world without needing to travel or adhere to a strict schedule. It allows for a more personalized learning experience (Josep, 2020). There is frequently access to a wide range of material such as videos, photos, and eBooks, and tutors can also incorporate other formats such as forums or discussions to improve their lessons. Online teaching and learning, according to Singh and Thurman (2019), is described as learning experiences in synchronous or asynchronous environments using various devices with internet access such as mobile phones, laptops, and so on. The learner can be anywhere during this process to interact and learn with the teacher and other students. Branch and Dousay (2015) contend that effective online learning requires thorough instructional design and preparation, as well as a structured design and development model. The design process and the thorough analysis of various design decisions have an impact on the instruction's consistency. However, it is this cautious design process that would be ignored in the majority of cases during these emergency changes (Hodges et al., 2020).

Horn and Staker (2011) estimated that by 2019, quarter of all high school classes will be delivered online. Additionally, online delivery differs from conventional face-to-face education in that student

interactions are between student and faculty, student and peers, and student and technology (Anderson et al., 2011; Fein & Logan, 2003; Juan et al., 2011). Making education more affordable and personalized would revolutionize it (Christensen et al., 2011). Technology is a field that can easily be taken for granted as it is interwoven with everyday life, but technology is not used widely for many due to lack of resources (Gilbert et al., 2015). E-learning platforms are a creative tool that can help students strengthen their skills and talents to achieve their desired learning outcomes through the rapid advancement of the Internet (El Aissaoui et al., 2019). It is a holistic approach covering a broad variety of instruction, technology and resources that provide an efficient learning environment. When online learning took place at the end of the 20th century, most online classes used chat rooms, instant message and text messages (Sun & Chen, 2016). The individual differences between students are evident in an online learning environment. Time, length of learning and content are selected online. Interactions and so on. Some students prefer to do learning work during the day; others prefer to learn at night (Zhang et al., 2020). Some students participate in discussion groups, community activities, or other social networking software, while others prefer a silent study. The study style is a significant factor that affects individual differences of the learner across all the individual characteristics. In other words, different students have different learning style patterns (Felder & Silverman, 2002). Researchers have contributed significantly in the fields of identification and prediction of styles of learning, particularly online learning (Hmedna et al., 2020; El Aissaoui et al., 2019). It should be noted that both researchers and students believe that the efficiency of the learning process significantly improves, taking account of student characteristics (Huiting et al., 2015). In addition to video, learning materials were delivered through WhatsApp, Google Forms, Worksheets, YouTube, and Zoom. Teachers submitted lesson materials to students' parents through WhatsApp, Google Forms, and Worksheets, which were then given to the students. This educational media was used in conjunction with the media that most parents use (Rasmitadila et al., 2020). Student preparation for online learning can be measured comprehensively, taking into account equipment capacity, technological capabilities, self-directed learning skills, motivation, and perceived usefulness. Therefore, this study should generate information about teachers' perception and challenges of integrating ICT tools into teaching and learning.

3. ISSUES

The issue is that the rapid introduction of online education into higher education has diverted educators' attention away from recognizing major obstacles in teaching online courses and putting together a detailed review based on previous study (Mansureh et al., 2017). Transitioning from a traditional education setting to a distance and interactive learning environment will take time. At this moment, this rapid transition is correlated with a range of barriers and difficulties (Crawford et al., 2020). Various studies have indicated various issues, but the issues have not been categorized and incorporated under any topical classification to provide an organized summary of the issues for online educators (Mayes et al., 2011). ICT can be described as the integration of technological devices into education and other society sectors. Access to the required ICT tools is one of the most important issues to consider when assessing the progress of e-learning in both developing and developed countries (Yassine, 2021). Providing school infrastructure (Bakalar, 2018), such as an Internet network that not all schools had previously, particularly in villages, as well as the cost of buying expensive data packages, have been among the issues. In a majority of online courses, instructors teach with predefined content. In these courses, instructors face the issue of lack of empowerment. Some of the other issues encountered are personal, such as fear of using technology, being out of one's comfort zone, perceived in evaluation especially in assignments; and inability or difficulty in peer interaction, particularly in presentations. Smith and Mcdermott (2019) concluded that most learners preferred online learning over other forms because it allows for more versatility in learning, better time management, and more courses options. After all, of these issues, there is one thing that is causing the momentum. It is the ever-increasing stress and pressure on students. They are worried that they will not be able to complete their assignments on time due to a lack of connectivity. They could lose points or grades (Tanveer et al., 2020). Aside from technical and monetary problems, students identified a few other issues such as a lack of communication with the teacher, response time, and a lack of typical classroom socialization (Muhammad & Kainat, 2020).

4.   CHALLENGES

4.1 Passive Students

Students may face difficulties in group activities. The online environment, regardless of mode, poses additional challenges for the external or isolated learner, especially in terms of interaction, access, community, and support. Focusing on pedagogical strategies for helping learners through the creation and facilitation of group presentation interactive learning activities, as seen through the eyes of a teacher (Jenna, 2017). Unless carefully conceived, students may become passive observers instead of active participants in online training. Although these unengaged students can get the content of their classes, they cannot apply their knowledge outside the classroom. Student might perform tests and complete learning exercises, but they do not intend to communicate with previous materials or real-world examples using your new knowledge. Students must participate in the consistency, scope and depth of their education in order to become effective. Teachers identified significant challenges such as a lack of comprehension, a lack of opportunities for constructive interaction, a lack of opportunities for creative teaching, and mechanical class behavior. Lack of proper interaction with instructors is another major concern associated with online learning (Muhammad and Kainat,2020). It was discovered that teachers were unable to interpret the expressions and moods of their students, making it impossible to adjust the teaching pattern (Lokanath et al.,2020).

4.2   Internet Connection

The most challenging part of online teaching was the unreliable network connection. The relation is more secure if the students' videos and audios are turned off, but that style of teaching appears to teach to a blank wall (Lokanath et al., 2020). It determines the smoothness of educational activities is the technical experience of teachers in an online environment (Conrad & Donaldson, 2011; Ko & Rossen, 2017; Watson, 2020). These difficulties and problems with modern technology include downloading errors, installation issues, login issues, audio and video problems, and so on (Shivangi, 2020). For certain online teachers, juggling time between engaging with students and fulfilling responsibilities outside of the actual teaching situation is a major concern. In an online classroom, much of the learning is completed asynchronously and students often feel disconnected from their instructor, as well as their peers. It can be difficult for instructors to teach online when they struggle to gauge how students are comprehending course content, and whether they are participating in learning experiences. However, some students found difficulties with the online course. The most common problem was the lack of stable internet at home (Gilbert et al., 2015).Teachers made it clear that not all students had access to the Internet or computers at home in their remarks. These are the basic requirements they believe the Malaysian government should address before incorporating e-learning into our educational system. The harsh reality is that e-learning would take longer to introduce in Malaysia's rural areas (Mei et al., 2017). However, those with restricted delivery mode options may have different priorities due to additional work or family obligations that limit their ability to participate in alternative and perhaps preferred face-to-face or blended enrolment modes (Stoessel et al., 2015). Teachers faced a number of difficulties because of the emergence of technical problems. Several people do not really have a computer, literature, access to internet, personal computers or family who are supportive. Some seem to be doing. Not all parents have cell phones or laptop computers, and Internet signals, particularly in the suburbs, are weak. The challenges that these obstacles pose determine the types of educational activities that can be carried out (Rasmitadila et al., 2020).

4.3   Adapting to Unfamiliar Technology

The majority of teaching in an online classroom is asynchronized and students sometimes feel disconnected from their students and teachers. Teachers aim to assess how and when students are involved in learning work. However, the online course is challenging for some students. The most common problem was the lack of a stable internet at home. The involvement of students is critical in achieving excellent online learning outcomes. This can be difficult if the students are nervous because they are out of their comfort zone, which is compounded by technological difficulty (Gillett, 2020). Problems with data packages and ownership of cellular phones or laptops, as well as student passion for learning, limit student participation in academic activities. In the same way that students must be conditioned, teachers must find ways to keep students engaged (Rasmitadila et al., 2020).

4.4 Attitude

It is important to think about how people feel about e-learning. Despite the fact that information technology is considered "smart," it is still not considered a suitable tool for providing education. It is also considered second-best and is not thought to be "as good as" conventional face-to-face instruction. If e-learning is not properly supported or implemented, this could become a significant barrier. There are no advantages in terms of reaching students at a distance or enabling a more learner-centred pedagogical culture if the technologies offered are not used. While future generations of school students around the world are likely to adopt technology as a required educational tool in conventional, virtual, or hybrid classroom environments. Attitudes toward usability and accessibility to platforms will play a significant role in the future of educational strategy planning (Yassine, 2021).

4.4 Language

Another aspect that would help students is if the course was taught in their native language. This might not always be possible in countries with several different languages or global educations, but attempts should be made to provide bilingual information and advice such as study guides, technical assistance, and so on even if the material is in English.

4.5 Limited Resources

Other challenges, such as conditioning students to participate in online learning, is difficult for teachers. Factors that create these barriers may be divided into internal and external factors. Internal factors are difficulties arising from the student's home environment, such as interference from family members especially younger and older siblings (Rasmitadila et al., 2020). Many students complained that the course work was too difficult to self-study. Many tasks are still outstanding due to a shortage of study materials (Tanveer et al.,2020). The importance of learning at home is also felt by parents, who have additional responsibilities because they must be teachers at home, teach assignments, and constantly monitor (Sunitha, 2020).

5. METHODOLOGY

This study involved 31 teachers from secondary schools. These secondary school students are above average students, thus they need a challenging and differentiated curriculum. These teachers came from diverse backgrounds and pursued different subject for Maths, Additional Maths and Physics. The programme prepares students for life and encourages them to develop a knowledgeable curiosity and lifelong passion for learning. The international educational programmes and qualifications set the international standard. It consists of professionals, rooted in the rigour of the academic and represents recent research into education. The lessons were carried out by learning focused on teachers and students. The method focused on teachers was structured with lessons usually based on PowerPoint diagrams. The teacher used slides for 40 minutes' teaching, including definition, facts and examples, to provide a theoretical part of the subject. Tasks were given to students in the form of task, forum, discussion group, case study, discussion or presentation of the project.

6. RESULT AND DISCUSSION

Descriptive analysis was performed to indicate the correlation index between the teachers' perception and engagement in teaching. Summary of the teachers' demographic profiles shown in Table 1. The demographic results showed that men are at 11 frequency and 35% and women are at 20 frequency and 65%.

Table 1: Demographic Profile of Teachers.

Teacher	Frequency	Percent (%)
Male	11	35
Female	20	65
Total	31	100

The details of the results frequency of teaching hours are indicated in Table 2. In general, students considered that their teaching contributed positively, including growing interest in learning and developing communication skills. According to table 2, 74.2% respondents are teaching the subject around 3 to 4 hour per day and only four (4) respondents that teaching more than 4 hours meanwhile, the rest is around 2 to 3 hours.

Table 2: Frequency of Hours During Teaching Session.

(One hour session)				Frequency	Percent (%)
Valid	0 to 2 hours		2	6.45
	2 to 3 hours		2	6.45
	3 to 4 hours		23	74.2
	>4 hours		4	12.9
	Total		31	100.00

Table 3 indicates average teachers using application tools in elearning platform. 32.3% use once a week using tools in e-learning platform.While only 6.5% of respondents using it for every day meanwhile 16.1% respondents use the tools at least once a month.

Table 3: Average using application tools in E-learning platform (N = 31).

Item	Frequency	Percent (%)
Once a day	2	6.5
Once a week	10	32.3
Once a month	5	16.1
A few times a day	4	12.9
Unrelated/Never	10	32.3
Total	31	100.00

The result describes the challenges or difficulties in creating teaching and learning activities to stimulate students' engagement in the classroom. An online learning community provides an environment in which students are successfully educated, cognitively and socially (Sun & Chen, 2016). Accessibility has a profound influence on the participation and results of the student and thus has a significant impact on the student 's performance (Gilbert et al., 2015). Based on the main results , it is evident that students have a good understanding of the preferences of learning styles while learning. This is especially true when appropriate styles of learning are injected that correspond to the maturity level of the students. Table 4 shows the challenges that facing by teachers in creating their learning activities for students.

Table 4: Challenges faced by teachers in creating learning activities for students (N = 31).

Item	Frequency	Percent (%)
Lack of knowledge	5	17
Time management issue	7	22
Limited growth opportunities	4	12
Lack of teaching skill	8	26
Limited sources	5	15
Not interested in technology	2	8
Total	31	100.00

Based on the data obtained, the highest percentage challenges facing by teachers are lack of teaching skills that is 26% followed with time management issue with 22%. Besides that, there are 17% teachers' lack of knowledge meanwhile 15% with limited sources. 12% among respondents with limited sources while 8% not interested in technology. The importance of ICT in society as well as in education, it would be an essential step towards improvement of the standard of education and training to recognize potential challenges to incorporate these technologies in school (Ghavifekr et al., 2016). The study also suggests that teachers apply the level of student participation during teaching. In the classroom, therefore, the students prefer to hear carefully. Emotion plays a key role in the social contact between teachers and students, which enhances cognitive processing and the participation of students. If teachers' challenges can be resolved, this is a step towards enhancing the learning outcome for our students (Ghavifekr et al., 2016). The impact of studying online and discovering ways to help online students effectively adapt their learning environment in order to become successful students (Gilbert et al., 2015). Due to the importance of ICT both in society and in the future for education, it will be an essential step in enhancing the standard of teaching and learning to recognize potential obstacles in incorporating such technologies in schools (Ghavifekr et al., 2016). Since teachers, attitudes and expectations are necessary for the effectiveness of an innovation, it is crucial to determine how teachers see this innovation and its effectiveness as an enhanced learning instrument. It is expected to contribute to the increasing knowledge base of Malaysia's 21st century ICT use in education (Ghavifekr et al., 2016).

7. CONCLUSION

In conclusion, education must be regarded as a collective initiative involving the government, teachers, parents, and schools to improve the effectiveness of teaching and learning practices that have been harmed and ensure that students do not fall behind (Rasmitadila et al., 2020). This pandemic affects teachers in the online learning process because teachers are not free to track children's overall progress. Monitoring children remotely is a constraint, together with the presence of children who are rarely directed by parents and also lack of understanding (Maman et al.,2020). Online education is deeply rooted in adequate instruction preparation and design with many available hypotheses and models, but the migration phase of universities to online education has become uncertain due to the pandemic's absence of proper planning, design, and creation of online instructional programs (Olasile & Emrah, 2020). Online education is less expensive than conventional education (Josep, 2020). Nonetheless, there are a variety of questions about online teaching and learning. Some of the problems associated with online education are accessibility, affordability, versatility, learning pedagogy, life-long learning, and regulation (Dhawan, 2020).

Looking at the pandemic scenario, the transition of teaching and learning to online mode has gained widespread acceptance from student teachers. Because of the hasty adoption of online mode, student teachers were unprepared psychologically, financially, socially, and technically, and teachers faced difficulties due to unfamiliarity with technology pedagogical approaches Motaghian et al., (2013).

Hathaway (2013) advocated for the use of a variety of learning resources to keep students engaged in an online classroom. Encouraging good relationship and communication between teachers and students are crucial. Enthusiasm for education and the readiness to help their students succeed is important and can be achieved (Sun & Chen, 2016). Many researchers have identified how a learning community looks in an online sense and stressed its value from different points of view. This study reveals the effect of humour on student participation in the classroom in Malaysia in teaching and learning. The use of today's technology and facilities to communicate with the young generation with skills of the 21st century is a challenge; if teachers struggle to cope with this situation, they will always stay behind. Teachers must also study the nature of the student and appreciate it. Thus, students will be engaged in the classroom with an increase in participation. Through necessary and applicable humor; this helps them appreciate the theoretical subject more profoundly. The attitude of the student is another problem that needs to be discussed in order to appreciate students and avoid distraction from learning. They also have to do with how much time the development side needs to put into student support functions. Students will be very confused and in need of a lot of guidance such as administrative issues, technical issues, how to be an online learner, and so on in an environment where e-learning is new and ICT literacy is poor. Clarity in assignment guidelines, as well as more time for students to complete online interactive learning activities, are needed for improved student understanding (Allen et al., 2013; Miller, 2014). The learning results, goals, and tasks for students must all be in harmony. Assessment, both formative and summative, is critical in an online course, just as it is in a face-to-face course (Miller, 2001).

Other suggestions for enhancing online instructors' teaching effectiveness include using a range of e-learning methods and techniques to promote students' activity, discovery, and knowledge creation, such as dynamic presentations, laboratory tutorials, simulations, conceptual discussions, interaction, and collaboration (Juan et al., 2011). During the COVID-19 crises, institution heads and department representatives can take the requisite steps to improve online teaching and learning efficiency, which will aid in the learning of pre-service teachers (Anna, 2020). Despite the difficulties, online learning results in higher levels of student participation. In the face of a tragedy like the COVID-19 pandemic, online learning will certainly be a help to academic excellence (Ahmad et al.,2020).

The implication is that teachers should be able to build the necessary humour in the classroom through pedagogical skills. It can be very helpful for them to implement types, forms and humour strategy. The scope of this research is limited to a teacher-trainee relationship in the multidisciplinary engineering education field, which makes it possible for students in related topics with different major departments, including science, mathematics and arts, to have the results. This study is therefore not limited to teacher. It also offers an opportunity for the Malaysian 2020 vision to render Malaysia a global leader in ICT. This study is therefore not

limited to teacher relations. It also offers an opportunity for the Malaysian 2020 vision to render Malaysia a global leader in ICT (Ghavifekr et al., 2016). Although most of us are in all types, giving the students the best chance of success by organising courses at all levels. More research will open doors to educate students the advantages and possible disadvantages of online learning and the features of a reliable internet student (Gilbert et al., 2015). Feedback is an important part of developing a good partnership between teacher and student, and it is expected that this will improve efficiency Canon et al., (2014). Without a doubt, collective commitment will bring the dream of digitalization of education to reality. COVID-19 introduces the disruptive but appropriate conditions for potential community leaders, including skilled academics, to examine what the entire intellectual environment will look like and that students will evaluate the current learning strategies to obtain something (Tanveer et al.,2020). Although the pandemic has shocked traditional face-to-face teaching, it has now presented learning institutions with a once-in-a-lifetime opportunity. As a consequence, there is a need to revamp the current system of providing learning. Formal education has traditionally relied on a face-to-face approach (Ahmad et al., 2020). The COVID-19 pandemic affects many aspects, including school life, student parents, teachers, and the learning process, which a teacher who has the duty to educate students cannot avoid. Teachers must find effective ways to facilitate academic and socio-emotional learning (Maman et al., 2020). The interaction mechanism between control and the classroom environment has a large influence on students, such as student excitement in the classroom, but it will be different if you conduct learning at home. As a conclusion, this is the time to seriously reconsider, re-vamp, and reinvent our education system in light of the unprecedented current situation. Informal and non-formal schooling are both seriously impacted (Lokanath et al., 2020).

8. ACKNOWLEDGMENT

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