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A Review on The Implementation of Remote Teaching: Highlighting the Experience of Primary School ESL Teachers

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Abstract
The shutting down of countries due to the rapidly spreading COVID-19, which was announced as global pandemic on March 11, 2020, has disrupted the balance of social interaction and organization. In the effort to flatten the infection curve and reduce total fatalities from the disease, educational institutions are forced to shut down resulting educators grappling for other alternatives for delivering instructions. With urgency to maintain the continuity of the education systems, Malaysia has decided to implement Emergency Remote Teaching (ERT) to replace the withdrawal of face-to-face interaction at school during the Movement Control Order (MCO). This paper reviews the implementation of ER and teachers of primary education perception towards ERT in teaching English as second language (ESL) and challenges faced during the implementation of ERT. This paper also presents some recommendations in addressing the challenges identified to provide better implementation and quality delivery of knowledge through ERT.
Keywords: Emergency Remote Teaching, English as a Second Language (ESL), Distance Learning, Educational Technology, COVID-19

Introduction
On December 30, 2019, China has reported a cluster of pneumonia patients in Wuhan, China to the World Health Organization (WHO). The shared viral strain of pneumonia was later named 2019nCOV, or also known as 2019 novel Coronavirus (Huang et al., 2020). Not long after, COVID-19 was declared as global emergency and quickly escalated into the WHO announcing it as a global pandemic on March 11, 2020 (WHO, 2020). Since the announcement of the global pandemic and the raging spread of novel coronavirus COVID-19 worldwide, many countries put into effect nationwide lock down to help flatten the curve of infection and contain the virus. The global lock down has disrupted the equilibrium of

social interaction and organization in every sector there is including the education sector. The pandemic precautions called "social distancing" is practiced globally as one of the measures to flatten the curve of spreading the virus by reducing interpersonal contact and minimizing community transmission that could help promote higher infection rate in dense social networks such as school and university campus (Weeden & Cornwell, 2020).

In this state of emergency of global pandemic, the cancelation of traditional face-to-face interaction between teacher and students at school is inevitable. With the absence of the face-to-face interaction, online learning and distance learning are the go-to solutions to maintain the continuity of teaching and learning process during lock down. In the context of Malaysian education landscape, the transitioning phase of integrating the technology and Information and Communications Technology (ICT) into the customary teacher-centered learning as opposed in the 21st century learning concept has escalated quickly into a full-scale implementation of e-learning. While some researchers (Cheok et al., 2017; Kerres, 2020; Wasriep & Lajium, 2019) state that the shift in delivering instruction online allows the flexibility of teaching and learning anywhere and anytime, some (Ali, 2020; Cheok et al., 2017) highlight the deficiencies of the implementation as the move to online instruction is unprecedented and staggering. What was supposed to be the smooth transition of blending the right amount of online learning with the traditional face-to-face interaction at school has escalated into the full-scale implementation of online learning, also known as Emergency Remote Teaching (ERT). This paper discusses the discourse on teachers' perception of the implementation of Emergency Remote Teaching (ERT) as well as exploring the deficiencies of ERT.

Current Pedagogical Trend in Teaching ESL in Malaysia

According to Trigwell and Prosser (2014) as stated in the Jensen, Jensen et al. (2020), teaching approaches are usually categorized into two qualitatively different categories; namely teacher-centered (teacher-content) approach and student-centred (student-learning) approach. Since Malaysia is notoriously known to have practiced the examination centric education system, many teachers are forced to maintain the accustomed traditional teacher-centered learning approach in desperation to achieve top results academically (Azmi, 2015). Wright (2011) states that teacher-centered learning approach is seen as an effective method for most teachers in preparing students for examination as it attempts to cover the curriculum and materials required for the students to memorize. In addition, teacher-centered learning approach involves mass transmission of information from teachers to students through lectures and summative assessments which assess students' ability to replicate teacher-delivered materials (Vavrus et al., 2011) which is ideal for the examination centric education. However, research (Wright, 2011) found that teacher-centered learning approach are becoming obsolete to cater to the unique characteristics and needs of the newer generation of learners called the Generation Z or Net Generation (Hashim, 2018). Thus, practicing the traditional teacher-centered leaning approach might have contributed to the appalling fifteen years old student's performances in reading, Mathematics, and Science in the OECD Programme for International Student Assessment (PISA) in 2009 and 2012. Malaysia was ranked fifty-second out of the sixty-five participating countries in 2012, which was still below OECD's average (Abdullah & Francis Peters, 2015) with mean score of reading assessment seen significant dropped from 414 in 2009 to 298 in 2012.

In respond to the poor performance in PISA 2012, the Ministry of Education (MOE) Malaysia has outlined strategic planning in the Malaysia National Education Blueprint (NEB) 2013-2025 which aim to raise Malaysian education standard to be at par to the international standard. Upon the rolling out of the current Malaysia National Education Blueprint (NEB) 2013-2025, the education landscape in Malaysia has seen speedy implementation of the 21st century learning in primary schools and the implementation of the Education 4.0 in the secondary and tertiary education. The implementation of the 21st century learning and the education 4.0 across all education level aims to prepare the students for the forthcoming Fourth Industrial Revolution (4IR) where we witness the rapid development on the robotic and augmented reality. Since the paper aims to investigate the perception of primary school teachers in teaching English as second language through ERT, the following discourse discusses the current pedagogical trend revolving in primary education only. Most primary school teachers are adopting and adapting to the 21st century learning activities in their teaching and learning processes in class. The implementation of the 21st century learning has changed Malaysian education landscape towards holistic systems that emphasizes on transforming the traditional teacher-centered learning to more immersive and interactive learning. 21st century learning centralizes the student-centered learning approaches where the learning revolves around developing students' deep understanding of the content knowledge according to their learning needs (Muganga & Ssenkusu, 2019). The 21st century learning also emphasize on the development of the 4C skills; namely creativity, critical thinking, collaboration and communication (Sipayung et al., 2018). Those 4C skills can be best developed through conducting more activity-oriented lessons such as project-based learning and blended learning (Garba et al., 2015). Instead of merely understanding and memorizing the content knowledge taught by teachers in classroom, the students are now expected to be able to analyze, synthesize and evaluate the information and knowledge learned.

Along with the implementation of the 21st century learning, the MOE has manifested their intention to improve the education standard and quality learning by empowering the use of ICT in the teaching and learning process as stated in the seventh educational shift of the NEB 2013-2025. Through the implementation of the seventh educational shift, MOE envisions students to be able to access wider range of content that is more engaging and interactive through the infusion of technology into the teaching and learning process inside and outside the classroom (Malaysia Education Blueprint, 2013). The infusion of technology and digital literacy is important to improve and to promote interactive, fun, and safe learning environment for the learners (Boholano, 2017). Transitioning from Grammar Translation Method (GTM), which focuses on the teaching of grammar rules rather than oral competency, to Communicative Language Teaching (CLT), which emphasizes more on the ability to communicate rather than accuracy, MOE is currently putting in emphasize on blended learning in teaching English as second language (ESL) learning. According to Albiladi and Alshareef (2019), blended learning is an enhanced instructional approach that incorporates traditional teaching methods with online learning. The implementation of blended learning is in support to the infusion of technology into the teaching and learning activities as mentioned in the seventh educational shift in the NEB 2013-2025. Blended learning helps incorporate the use of technology into active and collaborative learning.

In 2011, MOE had provided schools with 1BestariNet and software. 1BestariNet is a project led by the MOE to provide access to a web-based learning platform, called FROG VLE, which provided virtual equivalents of real-world learning to all ten thousand fully aided government schools (Cheok et al., 2017). However, due to the low value for money to the

MOE vis-à-vis the high service cost since its first implementation, MOE has replaced FORG VLE with Google Classroom in 2019. Google Classroom in which claimed to be cost effective, made easily available and accessible to the students and most importantly user friendly is anticipated to be the more effective and appropriate platform to conduct blended learning considering the current technological growth and educational situation.

Despite the efforts put in by the MOE, the integration of the usage of ICT and technology in education is still limited amongst Malaysian primary educators (Wasriep & Lajium, 2019). Researchers (Nilsson & van Driel, 2010; Osman et al., 2014; Wasriep & Lajium, 2019) have reported that some veteran educators are having difficulties blending with the recent teaching technologies due to the inabilities to operate educational technology or limited technology literacy. Constraints such as lack of resources, poor internet connection and limited competency in operating educational technology are reported to be some of the limiting factors in implementing and integrating technology and ICT in teaching and learning processes (Osman et al., 2014). To put in simpler words, the Malaysia education landscape is still in the transitional phase from the traditional teacher-centered learning approach to adapting educational technology and technology infused lessons as suggested in the recent education trends.

Implementation of Emergency Remote Teaching in Malaysia

Emergency Remote Teaching (ERT) is defined by Hodges et al. (2020) as a temporary shift of instructional delivery to an alternative delivery mode due to crisis circumstances. The main distinction between ERT to the conventional e-learning is the fact that educators are forced to makeshift the bare minimum resources and have limited preparation time at their disposal to conduct online instructional learning. By no means that the implementation of ERT is to replicate a robust, functional, and optimally effective educational ecosystem, instead, the main purpose of the alternative instructional delivery, ERT, is to serve it purpose as a quick temporary fix in providing access to educational interaction between the teachers and students as well as consistently available during emergency or crisis. However, the sudden transformation of instructional delivery to ERT has left educators grappling to figure out how to use digital tools, online resources, and apps to continue their teaching at a distance (Abdul Rauf & Suwanto, 2020). Adding up to the existing challenges is the limited literacy in operating technology by some educators to optimize the ERT (Osman et al., 2014; Wasriep & Lajium, 2019).

Few days after the implementation of Malaysia's Movement Control Order (MCO), Education Minister Dr. Mohd Radzi Md Jidin advised teachers to find the best alternative ways in lessons delivery as he announced that learning activities will be conducted per usual (Harian Metro, 2020). With the cancelation of the traditional face-to-face interaction between teachers and students, comes the spiking trend in incorporating technology and distance learning. Teachers are reported to have use platforms such as Zoom, Google Meet, Skypes and other meeting applications to conduct synchronous instructions delivery while platforms such as Google Classroom, WhatApps, and offline worksheet to conduct asynchronous learning (Metro, 2020).

Despite the sudden implementation of the ERT and instant arising challenges in its implementation, MOE has come up with a few initiatives to address the struggles teachers and parents faced in providing quality education for the students. To help ease the sudden transition to remote learning and to support teachers to conduct effective online lessons, MOE has provided an online education service called EduwebTV. EduwebTV, an online

education service provided by the MOE, enables students to access educational videos to prepare for formal examinations. EduwebTV is seen as alternative tools to deliver mass lectures through channels streaming via Youtube and Facebook. However, not all students have access to internet to stream EduwebTV. Subsequently, in recognition to the ninety-eight percent of households who own television as stated by (Department of Statistics Malaysia, 2017) and the possibility of yielding better percentage of access to learning materials for students, MOE has rolled out *Program TV Pendidikan* or *Kelas@rumah* as an alternative for students with limited access to the internet. Similar to EduwebTV, Kelas@rumah provides its viewer with academic contents to help students facilitate their own learning at home. Besides from online streaming and television, Radio is considered an important platform. MCMC (2019) reported that radio was still a primary information transmitter, reaching about 20 million listeners. Radio is a good platform to convey the teaching of subjects which require fewer visual aids and more story telling such as history and moral education.

Teachers' Perception on The Implementation of Emergency Remote Teaching (ERT)
Since ERT only happens recently due to the global pandemic caused by COVID-19, not too many teachers have much experience on how to design and execute effective ERT while providing quality and accessible education to their students. The perception on the use of educational technology and the implementation of conventional online learning while not ERT specific, gives some idea of how teachers' perception plays an important role in the effort to effectively maintain the continuity of educational interaction amongst students.

Cheok et al. (2017) did a study to investigate secondary teachers' perception towards the implementation of e-learning. Based on the findings, the researchers state that teachers perceive e-learning as a holistic platform to develop the 21st century learning and working skills needed by the young learners. While conducting e-learning means shifting the focus to student- centered learning, many teachers perceive e-learning as a mechanism to increase students- teacher interaction thus increasing productivity and academic performance. With the implementation of e-learning, the study reported that many teachers perceive e-learning as beneficial in terms of the development of their ICT skills and digital competencies. However, Cheok et al. (2017) reported that some teachers feel that the implementation of e-learning as burdening due to the limited ICT skills and digital competencies of both teachers and students. In addition, it is reported that some teachers feel that incorporating educational technology into the lesson distracts students' attention from the main objectives of the lesson and strong classroom management skills are needed to control the notoriously noisy stereotype of student- centered classroom (Cheok et al., 2017).

In an article describing how education system in Germany cope with the global pandemic, Kerres (2020) reported similar reaction on teacher's perception towards the implementation of ERT in comparison to the findings in Cheok et al. (2017) study. Kerres (2020) states that many teachers benefit from the implementation of ERT in terms of their professional development in increasing their digital competencies. Comparably, some teachers demanded for the traditional face-to-face interaction between students and teacher to be restored and calling for a stop the promotion of digital tools in education (Kerres, 2020).

Pedagogical Implications: Challenges and Recommendations
The reception towards the implementation of ERT has been mixed reaction from teachers, parents, and students. Some teachers welcome the implementation of ERT while embracing the challenges that come along with it. On the other hand, some are resentful and demand for the restoration of the traditional face-to-face interaction with the students. In this sections, suggestions, and recommendations in addressing the challenges that might influence teachers' perception towards the implementation of ERT are discussed. Based on the literature, two common emerging themes have been identified amongst other factors as the main challenges face by teachers, parents, and students during the pandemic-prompted shift to ERT. The two challenges are the lack of assistance to support learners' learning process in terms of appropriate learning facilities, ICT knowledge, and internet connection, and the incompetency of in-service teacher to execute effective and successful online learning.

Lack Infrastructure in Support to the Implementation of Emergency Remote Teaching (ERT)
Khalidi et al. (2020) reported that thirty-seven percent of the approximately nine hundred thousand students who were involved in a survey by the MOE do not have any appropriate devices, while only six to nine percent of students own a personal computer and tablet to participate actively in ERT during lockdown. In respect to the statistics provided by the MOE, Khalidi et al. (2020) noted that the survey by the MOE may use convenience sampling approach which may disproportionately capture disadvantaged students which concludes that the statistics may represent a small number of students who have access to internet. Some students in rural areas, especially in Sabah and Sarawak, do not even have proper internet connection to participate in such survey. In sum, Malaysian students' main barriers toward active participating in the implementation of ERT are lacking appropriate devices and poor internet connection. The government has yet to respond appropriately to address the lacking appropriate devices for learning purposes. Initiatives such as providing grants for devices purchases and setting up a device loan scheme similar to the existing textbook loan scheme can be considered to provide better access to education through online learning (Khalidi et al., 2020).

Providing better infrastructure and facilities for students and teachers, in terms of online learning platforms and appropriate learning devices, for better implementation of ERT alone means nothing if good internet connection is hard to get. Khalidi et al. (2020) reported that the penetration rate for the national mobile broadband was only approximately eight percent per hundred people. Additionally, the lack of fiber optic networks does not help in improving high speed internet connection in the country (Khalidi et al., 2020). In relation, poor internet connectivity and limited access to online materials would result in inequality in education in terms of educational access during lockdown through the implementation of ERT especially towards the rural area communities and socioeconomically disadvantaged students who have limited access to internet at home.

The government has responded by negotiating terms with telco companies to provide better internet plans for Malaysians. As a result, the government managed to provide free 1GB mobile data daily to help ease the implementation of online learning, although it is not adequate to support heavy teleconferencing and video steaming (Khalidi et al., 2020). Telco companies should consider providing additional free mobile data in order to help the cause in the effort to ease the transition to online learning. The current situation should be

taken as the opportunity to increase investments and to speed up the implementation of the National Ferberization and Connectivity Plan (NFCP) given the increasing dependence on high-speed internet access in the 4IR era. NFCP is the government's strategic initiative to bridge the digital gap between urban and rural areas in Malaysia as well as to improve the country's economic competitiveness through connectivity in preparation for the 4IR.

Other initiative that could promote better implementation of the ERT is to collaborate and work with companies such as Google or Microsoft to provide wider accessible platform for effective online learning to take place. For example, the Ministry of Education Science, Culture and Sport of Georgia has provided all two thousand and eighty-six public schools in the country to be easily made available with the Microsoft teams platform (Basilaia & Kvavadze, 2020). Additionally, Microsoft offered its premium version of Teams for free for six months and lifted existing user limits while Google offered larger meetings capacity up to two hundred and fifty people and recording functionality for free to its G suite and G Suite for Education customers in Georgia (Basilaia & Kvavadze, 2020). Subsequently, the number of users in Microsoft teams has seen an exponential growth in activity from seven hundred and fifty to one hundred thirty-eight thousand six hundred and ninety-eight after the aforementioned measures have been taken per reported by the education management information system of Georgia (Basilaia & Kvavadze, 2020). In results, Georgia's transition towards the implementation of online education systems at school was successful.

Undeniably, to facilitate the infrastructure needed to implement ERT effectively would require a massive chunk of government allocations. Investments in developing the infrastructure to facilitate online learning is inevitable as the future of educational landscape are shifting towards blended and online learning and the integration of educational technology. Initiatives to provide adequate infrastructure to implement ERT might close the existing gap of not having the fundamental face-to-face interaction between teacher and students in which would influence teachers' perception tremendously toward the implementation of ERT. The positive perception towards ERT might yield better quality in lesson delivery through the implementation of ERT.

Teacher's Readiness in Adapting Emergency Remote Teaching (ERT)
Another major factor that influences teacher's perception and impede the success of ERT is teacher readiness towards transitioning instructional approach through online learning. Teachers need to be literate in educational technology and possess adequate ICT skills to accommodate and facilitate students' learning experience to its optimum potential. While ICT skills are regarded as highly necessary and important to operate effective online learning, teacher need to be knowledgeable on e-pedagogies to maintain students' active participation and interest. While most Teacher Training Institutes are very much focused on classroom teaching pedagogies, little emphasizing is given to develop teachers' skills and knowledge on online learning. As a result, a big number of teachers were completely unprepared to design effective remote learning experience to aid students' learning during lockdown caused by current global pandemic. In a study to identify the view and perception of teacher on e-learning, Cheok et al. (2017) reported that teachers highlighted their lack of skills and confidence in utilizing the FROG VLE leading to the calling for urgent need for more training and assistance in integrating educational technology and delivering e-learning at the Teaching Training Institute. Providing adequate technical support and assistance to teachers

would help them to overcome the challenges that hinder the effectiveness of conducting e-learning (Lewis et al., 2004).

Conclusion
Although Emergency Remote Teaching (ERT) is designed as a temporary solution to address the inevitable withdrawal of the traditional face-to-face interaction in all education institutions due to life-threatening crisis, it is important to acknowledge the challenges faced by teachers and students as they are the policy implementers and the end-users of the education policy. Their feedbacks on the implementation of ERT, be it positive or negative, would improve to the betterment of future implementation of such instructional approaches. To conclude, the government need to put more investment in developing appropriate online learning infrastructure including improving internet connection across the nation to avoid inequalities in access to education. Subsequently, providing more emphasis on training in-service and pre-service teachers with the knowledge to design and execute effective e-learning pedagogies as well as upskilling teachers with relevant and sufficient ICT skills to develop teachers' digital competencies should not be regarded as lightly. It is especially urgent for the government to attend to these barriers to improve and produce high quality instructional delivery of academic materials in maintaining the continuity of the education system during emergency crisis caused by COVID-19 pandemic.

Based on the drawn conclusion, it is obvious that ICT skills and adequate technological devices play a pivotal role to help perform successful and effective ERT. Therefore, the Technology Acceptance Model (TAM) theory by Davis (1989) can be served as a general framework to address teachers attitudes and to propose necessary solution in addressing the arising challenges in the implementation of ERT during the COVID-19 pandemic. Davis (1989) proposed that the behavioral intention of the user towards technology directly affecting the usage of the technology. In this context, it is inferred that the primary ESL teachers attitudes towards the use of technology in ERT directly influence the likelihood of teachers using ERT as the alternative teaching approach during time of crisis. To increase the likelihood of successful and effective delivery of ERT, the concerning parties, especially the Ministry of Education, need to attend to the barriers that affect teachers' perceived usefulness and perceived ease of use of ERT. However, due to the lack of data in this review, the conclusion drawn must not be generalized towards the whole population of primary ESL teachers in Malaysia. It is recommended for future studies to have multiple sources of data while having a wider range of samples in investigating the teachers' perception, acceptance, and attitude towards remote teaching. The challenges highlighted in this review provide a point of reference for researchers to conduct further investigation towards teachers' acceptance level on the implementation of ERT or online education in general. Moreover, this review adds up to the limited existing knowledge regarding the implementation of remote teaching and online education from the ESL primary teachers' perspective.

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