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**THE STAGES OF NATIONAL EDUCATION SYSTEM
OPERATION: ISSUES, RATIONALE, AND CHALLENGES FOR
THE MINISTRY OF EDUCATION MALAYSIA (MOE) IN
FACING POST PANDEMIC NORMS OF COVID-19**

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Abstract:

In the context of this paper, the discussion on the operation of the national education system to be implemented in stages is highlighted through the issues, rationale and challenges of Malaysia facing the post-pandemic norms of Covid-19. The objective of this writing is to debate the relationship between the Covid-19 pandemic and the efforts of the education sector in transforming Teaching and Learning sessions. Secondary data analysis methods utilise the acquisition of journals, reports, books, interviews, online news and current printed materials. The findings include (i) New Norms of Education, (ii) Mandatory Student Ownership of e-Learning Devices and Gadgets, (iii) Educator Mastery of Online Learning Delivery Methods, (iv) Accessibility of Digitisation of Education Along with the Demands of Industrial Revolution 4.0 (IR4.0) in Society 5.0, (v) Examination Rescheduling Issues and Fee Payment Rate Reduction, and (vi) Career Prospects of Post-Covid Graduates. The goal of this research looks into (i) the direct impact of school closures created huge learning gaps on children in the country, as well as (ii) rehabilitating the higher education system following the Covid-19 pandemic, enhancing digitalisation of education, empowering up-to-date teacher training, and providing better educational facilities in line with the Covid-19 post-pandemic future education concept.

Keywords:

Ministry of Education Malaysia (MOE), National Education System, Post-Pandemic Norms Covid-19, e-Learning

Background

The Ministry of Education Malaysia (MOE) is facing numerous challenges for the past three years due to the unexpected arrival of Covid-19, which has changed the educational structure in Malaysia (Othman, Esa, Abu Bakar & Mokhtar, 2021a). At the beginning of year 2020, our country Malaysia carried out a curfew or Movement Control Order (MCO) for two weeks on 18th March 2020 until 31st March 2020 for Phase 1, followed by Phase 2 which started from 1st to 14th April 2020, then continued to MCO Phase 3 from 15th to 28th April and then Phase 4 started from 29th April to 12th May (Yusoff, Othman, Mohd Shah, Esa, Zulhazmi, Ibrahim & Ationg, 2021). During the MCO phases, all schools and institutes of higher learning were closed to prevent the spread of Covid-19 virus among students. The closing of these educational institutes is expected to have a long-term impact on the education and well-being of the affected students.

Operation in stages is related to the reasons why hybrid learning is done as most of students, particularly those in rural areas have internet access problems and final year students must complete their final year projects Abu Bakar, Othman, Mokhtar, & Esa (2021). Hybrid lectures refer to lectures conducted according to the appropriate time, i.e. some students on campus attend lectures in lecture hall while others study online in their respective rooms or dormitories. Due to the fact that these students are required to come to campus, the Higher Education Institutions (HEI) and the Ministry of Health Malaysia had to propose for the students to enter HEI in stages. Therefore, students who are experiencing such issues are encouraged to come to campus to ease the affair of students and professors. Students who have been asked to come to campus are required to at least take one dosage of vaccine before entering the campus.

This is said so because vaccination is one of the Standard Operating Procedures (SOP) for entering the campus. According to the Minister of Higher Education, Datuk Seri Dr. Noraini Ahmad said that the implementation of the operation of student's admission to HEI involves those who have received the vaccine. This is also intended to boost the immunity of students before admissions as the Covid-19 virus will infect anyone regardless of age, rank and property (Astro Awani, 2021a). According to the Head of Pharmacogilans Pharmaniaga Berhad, Vanessa Daniel also said that herd immunity is important in providing protection to the community, especially the high-risk group (Astro Awani, 2021b). This aims to achieve cluster immunity in which can break the Covid-19 chain among students and personnel on campus or in higher education institutions. Herd immunity can be achieved when 60 to 70 percent of Malaysians have received the Covid-19 vaccine and are able to curb the outbreak of Covid-19 transmission.

According to the Minister of Higher Education, Datuk Seri Dr. Noraini Ahmad based on data from the Covid-19 Vaccine Supply Access Guarantee Special Committee (JKJAV) said that 82 percent of students had received the vaccine and 90 percent of staff had also received a complete vaccine since October 2020 (Astro Awani, 2021a). This may open the HEI's eyes to the possibility of including these students on campus and continuing lectures in a hybrid format on campus, as most of campus students and staff have taken the vaccination and gained herd

immunity (Ationg, Esa, Ibrahim, Mohd Shah, Yusoff, Othman & Mokhtar, 2021a). Another issue that can be seen is what can be done if there are students have not had the vaccine and are requested to come to campus. This issue is being debated because there are a handful of students who are anti-vaccine, as well as students who have family members who are anti-vaccine and students who have health conditions that prevent them from receiving the vaccination. Therefore, students who have not taken the vaccine are asked to stay at home and undergo teaching and learning sessions online.

This is intended to prevent the virus from spreading among at-risk groups such as the elderly, and pregnant women, as well as to prevent infection among those who have not received the vaccine; however, HEI still strongly encourages students who have not received the vaccine to engage in online learning. However, there are also options if students are required to enter campus, among which students are asked to make a Real-Time Reverse Transcription-Polymerase Chain Reaction (RT-PCR) Test before entering the campus. Deputy Health Minister, Dr. Noor Azmi Ghazali said that this RT-PCR test is important to detect Covid-19 virus compared to the usual test which only detects body temperature (Berita Harian, 2020a). Therefore, the Ministry of Health (MOH) believes that the RT-PCR test should be performed on all students who wish to visit the university, not just those who have not received the Covid-19 vaccine. This is to prevent the spread of Covid-19 on campus because the campus cannot know the students' journeys before they arrive, and it is feared that these students are infected with the Covid-19 virus before entering the campus.

All issues raised in the operation of entering the campus in phases have been addressed, as it strives to safeguard the safety of all parties involved, and it is believed that students who have not received the vaccine would become infected and infect other students, lecturers, and employees on campus. This is due to the fear that students who have not taken the vaccine will be infected and the family or guardians will blame the HEI for what happened. To prevent this from happening, the HEI and MOH have collaborated to issue Standard Operating Procedures (SOP) so that all students can follow all SOPs and families cannot blame various parties if their children are infected with Covid-19 because these SOPs have been established to ensure the students' safety on their respective campuses (Hmetro, 2021a). As a result, students and campus employees should get the vaccine to break the Covid-19 chain, allowing students to study calmly while also helping to rid our country of the Covid-19 virus.

Literature Review

According to Mokhtar, Othman, Abu Bakar & Esa, (2021a), significant changes have occurred in the adoption of new norms including teaching and learning methods since Malaysia was affected by the Covid-19 pandemic. The MOE's decision to suspend schools paved the way for a new norm in virtual learning methods. This virtual learning increases reliance on the internet among rural students and those living in places with limited internet access. Online learning is a distance learning method that is becoming more popular in today's educational system. Online learning utilising technical improvements and facilities to deliver learning, educational content, and lesson planning (Mokhtar, Thia, Othman & Moharam, 2021b). This is due to limited internet access, which makes it difficult for students to participate in teaching and learning classes. Hence, there is a digital gap when there are students who do not have access to the internet, particularly in low-income families and a large family.

In research conducted by Mohamed, Judi, Fadzilah, Noor & Yusof (2021), the Malaysian Government has made efforts to bridge this digital gap such as promoting the National Broadband Initiative (NBI). For the less fortunate, the cost of accessing the internet is considered high. The Malaysian government is focusing on broadband penetration and internet access rates to reduce this digital divide. The community needs to be exposed to knowledge about ICT in line with the development of ICT infrastructure carried out by the government in rural areas. Despite efforts to find the most appropriate method of conducting classes by determining the level of internet accessibility of each student, student living in rural areas still lack internet coverage. The convenience of internet access can assist individuals in completing assigned duties comprehensively in the various sectors in which they are involved. According to a report by the Department of Statistics Malaysia, internet usage in Malaysia has increased from 21 percent in 2019 to 90 percent in 2019 (Rachel, 2020). However, only 8 percent had good internet access in the same year. To ensure that no one is being left out, they must be contacted in various ways or given student assistance by post (Ehwan, 2020).

Educators must first determine the level of internet stability whether low, medium, or high before deciding on the best platform to use to ensure a smooth learning process. According to the Sinar Harian newspaper report issued on 16th June 2021, online medium and television are the most popular choices in 90 percent of the country, following by home teaching materials at 85 percent and education through radio at 61 percent. A total of 36 percent stated that online education platforms were very effective, 58 percent said they were effective, and only 6 percent considered them ineffective, i.e. among high-middle-income countries. However, according to UNESCO and the International Telecommunication Union (ITU), 40 percent of the students involved do not have internet access, thus increasing the possibility of missed classes. This raises concerns about the fate of the students and undergraduates involved. For example, students from low-income and indigenous communities are among the 40 percent of Malaysian students who lack access to the internet or the necessary electronic gadgets to conduct their education efficiently since the Covid-19 pandemic hit the country.

Maszlee Malik, a former education minister stated that an estimated 4.7 million students were unable to attend school due to a lack of an appropriate and conducive online learning ecosystem. They are likely to miss out their studies (Bing & Jamaludin, 2021). He added that if the government fails to rectify this issue, the country will undoubtedly face peril, noting that the country is facing a 'lost generation' as a result of each student losing more than 185 school days or 4,440 hours. According to Berita Harian, published on 8th May 2020, 52 percent of students in Sabah do not have good internet access, and 70 percent of schools in Sabah are located in rural and remote areas with the rest in urban areas lacking internet access and learning devices such as smart phones, computers, or other mobile devices to ensure smooth online teaching and learning sessions (Berita Harian, 2020b). Sabah Education Director, Dr Mistrine Radin said the lack of such facilities, especially among students in rural and remote areas of the state, made the implementation of teaching and learning online very challenging for teachers and lecturers (Berita Harian, 2020b).

This is because of two factors, namely accessibility of internet access and mobile devices are critical in the teaching and learning process between instructors and students during this pandemic phase. It is clear from the statement that not all students have good internet access for online learning sessions, particularly those who live outside of the city. Not just because they cannot afford to buy internet data, but also because they live in an area where it is hard to

get an internet connection. The majority of students living in rural regions struggle to gain adequate internet access due to geographical considerations such as residential areas surrounded by trees or hills that make it difficult to obtain adequate internet access. There have also been instances where students have had to study or leave the house to obtain steady internet access in order to participate in lecturer teaching and learning sessions from home (Rahman, Marzuki, Mohd Nor, Kaspin, Jamal & Othman, 2021). The disturbing aspect here is that when those students need to leave the house at night to acquire internet access. This may have various unfavourable consequences for their safety. The goal of this discussion was to raise awareness among the community about the need for more actions to be taken to prevent students who do not have internet access from missing lessons.

Minister of Higher Education Noraini Ahmad acknowledged that students at Institutes of Higher Learning (HEI) are also facing the problem of having to bear high costs when attending online teaching and learning classes. However, she assured that the Ministry of Higher Education (MOHE) will do all possible to ensure that HEI students have equal access to the internet in all sections of the country including urban, rural and remote areas. This is to facilitate students' access to the internet and avoid falling behind in classes, particularly during this pandemic season (Ationg, Esa, Othman, Mohd Shah, Yusoff, Ramlie & Mokhtar, 2021a). Additionally, the Minister of Higher Education stated that her ministry is attempting to secure the best deals possible from data plan and device providers such as Maxis, Unifi, Celcom and Digi, as well as Education AOS Store Home. Simultaneously, MOHE would grant RM50 cash assistance to 76,153 new Public University students for the 2020/2021 academic year, totalling to RM3,807,650.00 (Sinar Harian, 2020a). She added that 76,153 students will receive benefits through the cash assistance programme to assist them in following teaching and learning online according to the lecture schedule that has been set.

Furthermore, the Ministry of Higher Education (MOHE) is in discussions with *Bank Simpanan Nasional* (BSN) for a financial loan initiative under the BSN MyRinggit-I COMSIS Scheme to assist HEI students in purchasing computers to facilitate in their learning process online (Berita Harian, 2020C). It is offered due to a recognition of the value and necessity of teaching and learning online approaches in an environment with new norms that emphasise aspects of public computing that appear to be different from traditional teaching and learning. Furthermore, MOHE has launched a crowdfunding campaign through the Student Volunteers Foundation (YSS) (Sukarelawan Siswa, 2022). The method was introduced to the public via *Tabung Prihatin Siswa* as a platform for inviting outsiders to join forces with MOHE to help alleviate the burden of needy students, particularly HEI students who come from disadvantaged family backgrounds due to a variety of factors such as a lack of family income to purchase the devices and learning materials required for HEI level study (Ibrahim, Ationg, Esa, Abang Muis, Othman, Yusoff, & Mokhtar, 2021).

Meanwhile, Noraini stated that as of the end of last year, a total of 195,028 data plans and 3,773 devices had been distributed to HEI students in the B40 category, while 3,997 laptops and desktops were now undergoing MOHE procurement for distribution to students involved (Sinar Harian, 2020a). In addition, Datuk Dr Mansor Othman, Deputy Minister of Higher Education stated that the Ministry of Higher Education will continue to address the issue of online learning, which affects the majority of students enrolled in institutions of higher Learning (HEI). According to him, students encounter two significant problems while using Teaching and Learning Online Methods (PdP), namely access to the internet and appropriate devices to

use. To overcome this problem, the Ministry of Higher Education is constantly working with other agencies such as the Ministry of Communications and Multimedia to resolve this issue. Mansor stated that in order to address the issue of limited internet access, the ministry has taken a variety of measures to assist HEI students, including the establishment of local internet centres nationwide that allow students who are not on campus and do not have access to the internet at home to utilise the internet centre's services (Sinar Harian, 2020b). At the same time, students affected by Covid-19 receive a 'one-off' assistance, and students who require practical training are allowed to return to campus. Simultaneously, the issue of students not having access to the internet in order to continue learning can be addressed through lecturer's innovative methods of delivering lessons. To ensure the success of the teaching and learning from home process when the country is still under threat from the Covid-19 outbreak, an educator must be innovative in determining the best strategy and adapting the way students' study to their abilities (Ationg, Raymond Majumah, Abu Bakar, Zulhaimi, Muda, Othman, & Abang Muis, 2021b).

According to earlier research, due to government regulations prohibiting face-to-face learning at institutions, the issue of internet access is a key challenge faced by students in the Institute of Higher Learning (HEI) while undergoing online learning during the Covid-19 outbreak. According to a study conducted by Chung, Mohamed Noor & Mathew (2020), who utilised the Online Readiness Scale (OLRS) instrument in Malaysia, 59 percent of HEI students stated that access to the internet was their primary barrier to online learning. The findings of this study corroborate those of Chung *et al.* (2020), who found that the primary barrier to online learning for students in Malaysia is a limited internet network and limited broadband data. However, the issue of students not having access to the internet may be solved immediately by the government and telecommunications taking proactive measures to resolve this issue (Mukhtar, Javed, Arooj & Sethi, 2020).

The usage of devices and internet access enables teachers to diversify their teaching approaches (Tobi, Osman, Abu Bakar & Othman, 2021). This new teaching and learning method necessitate the use of appropriate devices and reliable internet access as the primary components of the learning delivery process (Mukhtar *et al.*, 2020). Similarly, students have to access the use of certain platforms such as Google Classroom, Whatsapp, Webex, and Telegram for learning purposes. The internet is a system used widely around the world that supports a variety of network types including private, public, educational, academic, business, and even government networks. There are several ways that teachers can utilise to integrate online learning and one of them is Live Streaming. This is the most effective technique for a teacher to interact directly with students. There are various platforms that can be used to do Live Streaming, namely Google Meet, Zoom, YouTube Live, Facebook Live and many more (Mukhtar *et al.*, 2020).

This platform is ideal for educators and students who have adequate internet access as teachers can collaborate online on numerous activities, and students can also ask educators questions regarding the lessons given. This MCO has compelled educators in Malaysia to dig deep into their knowledge in order to improve teaching and learning online sessions. Video recording is another option that educators can utilise to integrate online learning approaches. Educators can record their teaching and learning online session using Google Meet and then upload it to their YouTube account, allowing students to view the session at any time. This video recording technique is advantageous for educators since it enables them to assist students who are unable

to attend live classes due to a lack of adequate internet access. As a result, there is no denying that studying in this pandemic era makes teachers in Malaysia to be more creative.

Methodology

The research methodology in this writing uses a qualitative approach based on social science disciplines that require careful observation of aspects that focus more on processes and events. Information from various sources such as primary and secondary sources by using secondary data content analysis methods related to history, law, historiography, sociology and ethnography and partnered with descriptive analytical discussion (Creswell, 2014; Eriksson & Kovalainen, 2015). Secondary data analysis methods utilise the acquisition of journals, reports, books, interviews, online news and current printed materials. The main purpose of acquiring data is to identify the issues that play an important role in the government's efforts especially the education ministry's concerns, rationales, challenges in dealing with Covid-19's post-pandemic norms are linked to the new norms of national education system.

Discussion

The findings include (i) New Norms of Education, (ii) Mandatory Student Ownership of e-Learning Devices and Gadgets, (iii) Educator Mastery of Online Learning Delivery Methods, (iv) Accessibility of Digitisation of Education Along with the Demands of Industrial Revolution 4.0 (IR4.0) in Society 5.0, (v) Examination Rescheduling Issues and Fee Payment Rate Reduction, and (vi) Career Prospects of Post-Covid Graduates.

New Norms of Education

The education ministry's concerns, rationales, challenges in dealing with Covid-19's post-pandemic norms are linked to the new norms of national education system, thus must be perceived as a conveyance for national unity identity and the integration of university students' self-identity post-pandemic Covid-19 (Othman, Esa, Abu Bakar & Mokhtar, 2021h). Among the issues faced by the Ministry of Education Malaysia (MOE) are the new norms that must be faced by the MOE, schools, and especially, the students (Othman, Yusoff, Mohd Shah, Esa, Ationg, Ibrahim & Raymond Majumah, 2021f). The MOE will face this challenge when the Movement Control Order (MCO) expires, thus students are required to attend school to carry out teaching and learning process as usual. However, this matter should be fully considered because the Ministry of Health Malaysia (MOH) has established a Standard Operating Procedure (SOP) in collaboration with the National Security Council (NSC) and the Ministry of Education Malaysia (MOE) that must be followed (Sinar Harian, 2021a).

This is a significant issue, particularly when it comes to managing primary school students because as we all know, primary school students are notoriously tough to manage due to their rugged and active nature. Hence it also has a significant impact on the school particularly on teachers, who are responsible for ensuring that students adhere to the SOP. When the school reopens, teachers and administrators will work diligently to ensure that social distancing is set accordance to the SOP. Among the measures taken by the school are to ensure that all students wear face masks, to ensure that students wash their hands frequently and bring hand sanitizer, to arrange students' desks in the classroom in examination setting, and to remove curtains to prevent the virus from spreading in schools, particularly primary schools where students find it difficult to comply with SOPs (Ramli & Rahman, 2021).

In the face of this Corona Virus season, learning methods must be slightly different and more challenging, and teachers will play a critical role in ensuring that Teaching and Learning sessions run smoothly and successfully break the Covid-19 chain by emphasising social distancing, the use of hand sanitizers, wearing face masks, and a culture of regular hand washing with soap before, during and after classroom activities. This is because, according to experts, the Covid-19 virus will remain with us for a considerably longer time with some predicting another one to two years. Therefore, all parties must not be complacent and irresponsible, risking harming the health and safety of teachers, children and students who will be present at school.

The challenge is also that all school activities must be done more systematically as schools previously held gatherings, academic events, and so forth without the fear of the Covid-19 virus spreading. Therefore, schools must carry out activities that are routinely carried out but in accordance with SOPs and practice social distancing such as delivering any announcements and gatherings using specific applications. For instance, when an event such as the Student Excellence Ceremony, it can be conducted online using Google Meet, Zoom, Webex or Facebook Live. Furthermore, the Ministry of Education Malaysia faces a barrier in the changing process of Teaching and Learning because while students are at home, they only have classes online. As a result, teachers must also pay attention to students' psychology because the learning system is no longer the same as it once was, and some students will be unable to follow the online teaching and learning session on an equal footing with other students.

Teachers need to be prepared emotionally and physically for physical teaching and learning sessions when students are required to return to school following the cessation of the Movement Control Order (MCO), as not all students were able to join online learning and completing assignments given by teachers (Nasir & Mansor, 2021). Teachers and students, on the other hand must be psychologically and physically prepared to facilitate the learning process. The Ministry of Education (MOE) is also considering how to make classroom learning sessions more casual with no requirement for activities that need close student contact. Among the challenges that the MOE and teachers will face when classroom capacity is insufficient is social distancing between students and forcing schools to arrange rotation for students to come to school. This is a significant difficulty for teachers as they will be required to teach both in the classroom and online.

According to the findings of the Relate Malaysia survey, youths in particular expressed high levels of anxiety (48 percent) and depression (45 percent), during the start of the pandemic (Nasir & Mansor, 2021). This is because it is difficult to adapt to drastic changes particularly in terms of students' lifestyles because formerly, teenagers were free to engage in activities both inside and outside of school. Following that, teachers play an important role in ensuring that students' mentalities do not interfere with classroom learning sessions. Returning to physical learning poses many more challenges for teachers and students because the routine established during the MCO period will be reinstated, namely getting up early to go to school, participating in physical activities while adhering to SOPs such as social distancing and wearing face masks.

Educators' Mastery of Online Learning Delivery Methods

Face-to-face teaching and learning is an educational system that has been used successfully all over the world for many years. This face-to-face physical class has many positive effects on

students because the teaching and learning process can be carried out physically, as well as physical activities. However, due to the Covid-19 pandemic, the traditional educational system has also shifted to teaching and learning online. According to Sinar Harian (2020c), the educational system is not exempted to the virus' impact because it is concentrated on teachers-students interacting directly via online learning methods. In the past, teachers used to be content to teach in the traditional way using chalk and blackboards in the classroom, however, since the government implemented MCO, educators have experienced a paradigm shift due to virtual teaching is now mandatory (Mokhtar *et al.*, 2021a; 2021b). Therefore, whether they like it or not, teachers need to comply and adapt their teaching methods according to the passage of time.

Although the virtual education system has only just been implemented in Malaysia, educators and students must learn to embrace and begin to adapt to these new learning norms so that Malaysia's education system does not fall behind those of developed countries (Astro Awani, 2020a). Online learning is the most appropriate learning approach in this pandemic era. This approach was chosen because it is capable of breaking the transmission of infection between students and teachers. According to Mukhtar *et al.*, (2020), virtual teaching and learning should be implemented since it can benefit by all parties involved, particularly students and it can also reduce the usage of paper. Despite the shortcomings of online teaching and learning implementation, students can be exposed to a variety of applications and cutting-edge technologies that can help them refine their abilities and skills for today's modern world (Mukhtar, Rosli & Taha, 2021).

Online learning methods are conducted through several applications that can connect teachers and students such as Google Meet, Zoom, YouTube, and Webex (Mukhtar *et al.*, 2020). Regardless of the application used, teachers should consider effective methods to teach to keep students engaged and motivated throughout online classes. It is obvious that by recording the learning video conducted by the teacher can assist students follow the teaching and learning session at any time, and this technique can prevent students from missing lessons. Furthermore, one way that teachers can utilise in implementing online learning method is to provide info graphic notes (Nasir & Mansor, 2021). The term info graphics originates from the English words which is an abbreviation for information and graphics, which is exhibited in the form of data visualisation to aid in the comprehension of difficult-to-understand material (Nasir & Mansor, 2021).

If teachers do not have access to high-speed internet, the easiest approach for them to communicate the teaching material to students is to create info graphic notes. Because these notes are concise and easy to read, it helps students in understanding and completing homework assigned by the teacher (Nasir & Mansor, 2021). This note can be shared over a Whatsapp group or given to students' parents. This method is also ideal for use among students who do not have reliable internet access. Clearly, educators may take a variety of measures to ensure that students do not fall behind in their learning during this pandemic era. The difficulty of techniques and methods of learning in this pandemic era can be addressed if educators have a strong desire to learn using today's technology. Thus, teachers' capacity to grasp the usage of advanced technology available today is a pride for the country since educators are willing to dig for information technology expertise in order to impart knowledge to their students.

For teacher and a student, online learning is not an easy task since it is a new norm for them and there are numerous challenges that teachers and students encountered during the

implementation of this teaching and learning online. Among the challenges encountered are the use of technology, access to the internet, a lack of gadgets, and students becoming easily bored throughout the implementation teaching and learning online (Bing & Jamaludin, 2021). This recognised constraint keeps educators acquiring new things that are available today, allowing teaching and learning online to continue successfully. In conclusion, changes in Malaysia's educational system have raised concerns among educators about the ways and methods of online learning, since they are concerned that teaching and learning online will not be applied appropriately. However, online learning has increased teachers' creativity in devising the most effective methods for delivering lessons. Therefore, the students should appreciate the educators' efforts and enthusiasm throughout the online teaching and learning since they were willing to keep their eyes from falling asleep merely to supply educational materials for students to gain information.

Students' Mandatory Requirements for Owning e-Learning Devices and Gadgets

The Covid-19 pandemic is a global health concern that has been plaguing the world since the end of 2019 and has drastically altered our daily lives as a result of the widespread of the virus. This has necessitated the adjustment of several systems including the educational system, to comply to the new norms. The Covid-19 pandemic had a profound effect on the global socio-economic landscape as well as the field of education. This has prompted the government to close all educational institutions in Malaysia in order to prevent and upsurge in Covid-19 cases (Astro Awani, 2020b). According to Sandeep Krishnamurthy (2020), new norms necessitate one-of-a kind solutions. The fact that the learning activities cannot be conducted as usual, educators have to conduct classes from home or via online learning platforms such as Google Meet, Zoom, Telegram, Whatsapp, and Google Classroom. This method is implemented to ensure that no students are left behind of the teaching and learning process conducted by teachers.

When the Ministry of Education Malaysia (MOE) announced the closing of schools to be replaced by online home learning, the teaching and learning atmosphere in this new norm continued to garner attention from all segments of society (Astro Awani, 2020b). Since the rapid transmission of the Covid-19 virus which created a worldwide pandemic, online learning also known as e-learning has become a mandated requirement for all students at various levels of school. Although online learning is not a new concept, it garnered less attention prior to the Covid-19 pandemic because teachers were more comfortable teaching in conventional way rather than online. However, as a result of the new norms, teachers are actively utilising online teaching and learning in order to adapt to teaching approached that were previously uncommon.

Some people believe that this new normative learning style has advantages. One of them is that it can reduce the amount of time and effort required, as well as the amount of energy expended, allowing it to be used for other purposes. Nonetheless, it has several drawbacks such as students having difficulty concentrating during the learning process due to the surrounding environments that are less conducive to learning (Chung, Mohamed Noor & Mathew, 2020). Additionally, there is the issue of online learning equipment such as device and gadget compatibility (Berita Harian, 2020b). Local media outlets began receiving a flood of concerns and complaints from parents, students and teachers regarding the difficulties they had during the online teaching and learning process (Sinar Harian, 2020a; 2020b).

One of the key challenges faced by the groups concerned is the question of student-owned devices and digital content. The digital divides between urban and rural students, as well as the wealthy and poor are not new issues in Malaysia, but it has received less attention due to the community's familiarity with conventional teaching and learning methods prior to the Covid-19 pandemic. According to an article published on 15th April 2020 by Astro Awani, Senior Minister of Education Dr MohdRadzi Md Jidin stated that 36.9 percent of Malaysian students do not have any electronic devices (Astro Awani, 2020c). The percentage of students who own a personal laptop is as high as 6 percent, followed by tables (5.67 percent), laptops (9 percent) and smart phones (46 percent). This is the result of an online survey done by MOE on Teaching and Learning Online (Astro Awani, 2020c).

According to the findings of the survey, the number of people who own electronic devices and gadgets for use in the teaching and learning processes in their respective houses is fairly small. Due to school closures, it is projected that over 4.7 million primary and secondary school students in Malaysia are obliged to continue their education online (Sinar Harian, 2021b). However, parental acceptance of online learning as a reality for children is beginning to be well received. Although parents' acceptance of the new learning system's rules in Malaysia is very encouraging, the issue of device and gadget ownership has yet to be entirely resolved. There were also students who had to share and take turns using one device with their siblings during teaching and learning sessions online. Additionally, there were a handful of parents who would lend their smart phones to their children to do assignments given by teachers.

Effective learning, curriculum delivery based on the Curriculum and Assessment Document (DSKP), two-way interaction between teachers and students, as well as support from parents, administrators and leaders are all directions for ensuring the teaching and learning process occurs in a continuous manner with the optimal use of medium. However, due key concerns such as device and gadget ownership issues, teachers did not fully get the involvement from the students during the online classes. According to Mukhtar *et al.*, (2020), small mobile phone screens also present a barrier for students as the items displayed by lecturers during online classes via Zoom or Google Meet cannot be properly viewed. This can have an effect on students' performance and motivation to engage in online learning (Mukhtar *et al.*, 2020). According to the Khazanah Research Institute (KRI) on 'Covid-19 and Unequal Learning' research report, as many as 37 percent of children had difficulty following Teaching and Learning Online due to a lack of devices and gadgets. While approximately 6 percent to 9 percent of students have laptops (Nasir & Mansor, 2021), these issues are believed to be interfering with the proper operation of the teaching and learning online.

These issues are solvable, for instance, several countries have taken proactive measures by providing devices and increasing students' access to the internet. Developing countries such as China, Finland, and the United States have permitted students to borrow digital devices from their school, making participation in online learning platforms simpler (Astro Awani, 2021c). In this perspective, the effectiveness of online learning is dependent on two primary factors namely high-speed internet connectivity and the availability of a device for students to take online classes (Bing & Jamaludin, 2021). If these two conditions are not met, complete online learning methods cannot be developed and implemented. Thus, they advised that if a country was unable to achieve the key standards, it be encouraged to continue the teaching and learning process through teacher and school activities such as the distribution of module notes or workbooks (Bing & Jamaludin, 2021).

Students can seek knowledge by using the provided learning modules, which are subsequently followed by training activities (Mokhtar *et al.*, 2021b). The final step is to re-submit the assignment for evaluation to the teachers (Mokhtar *et al.*, 2021b). In this regard, students are encouraged to use telephones to communicate with teachers via appropriate medium such as Telegram, Whatsapp and Tik Tok applications (Chung, Mohamed Noor & Mathew, 2020). Alternative approaches like these have been widely practiced by a handful of teachers in rural and remote areas where internet connectivity is often limited. Furthermore, parents who are unfamiliar with the curriculum and teaching and learning approaches are expected to be aware so that they can assist teachers and schools in leading children through the online classes.

Therefore, the MOE should consider a number of factors and recommendations. Among concerns that had been discussed including the teaching and learning manual should be updated and thoroughly reviewed to ensure that systematic and planned teaching and learning training is included. Then, online learning needs to place an emphasis on concepts and principles that must be communicated to and understood by all students. While the remainder of the learning time is focused to enhancing students' comprehension through activities such as research, experiments, and discussions, and so on. In addition, the government is encouraged to establish a special committee to handle difficulties related to device and internet connectivity that students faced during the teaching and learning process. This can benefit students while also alleviating the load on the MOE in dealing with this issue among students. All parties must play a role in this issue, and the responsibility of the problem cannot be placed just on the MOE.

Accessibility of Educational Digitisation Along with the Demands of the Industrial Revolution 4.0 (IR4.0) in a Society 5.0.

The Covid-19 pandemic has accelerated the digitisation of education in Malaysia. There is no doubt that Malaysia is significantly behind in meeting the needs of the Industrial Revolution 4.0 (IR4.0), let alone in providing a Society 5.0 (Othman, Mokhtar, Tham & Yong, 2021b). Society 5.0 defines society's social level in the digital era. Hence Society 5.0, in particular is a society capable of dominating life in both the virtual and physical worlds. If Society 4.0 can only access information or various forms of information in cyberspace, Society 5.0 can employ Artificial Intelligence (AI) to analyse data and return the results to real space in a variety of human forms, far exceeding human capabilities (Othman *et al.*, 2021b). As a result, industries and societies that were previously inaccessible to humans will gain new value as a result of this process. Therefore, it is vital to prepare our society in this country for the rapidity and change that the Industrial Revolution 4.0 will bring (IR4.0). Prior to this, we concentrated exclusively on Industrial Revolution 4.0 or more particularly, technology.

In reality, the Industrial Revolution 4.0 and Society 5.0 must coexist in order to accomplish holistic development that is the ability to establish and grow a global society's sustainable environment. Society 5.0 is a smart society that focuses heavily on the integration of intelligent technology and humans. This society is called the "soul machine" and it focuses on the technological and human-centred components associated with Industrial Revolution 4.0, such as cloud or cloud processing technology for data storage and processing, and Internet of Things (IoT) connectivity that connects smart senses, devices, cyber security to safeguard data and minimise risk, 3D printing or 3D printers to facilitate prototyping, drone technology, artificial intelligence (AI), robots, systems integration, big data and more. Furthermore, "intermediate reality" integrates the actual and virtual worlds and analyses service data to make more accurate or closer to the truth predictions. In other words, each forecast made by AI becomes

increasingly accurate over time. Rapid industrial transformation necessitates that society serve as the driving force behind the Industrial Revolution 4.0 and as such, they must evolve as well. Society cannot continue in its current form as technology will gradually replace us (Othman *et. al.*, 2021b).

Proudly, majority of Malaysians have adopted a new way of life following the outbreak of the Covid-19 virus. The Movement Control Order (MCO) announced by the government changes the daily routine of Malaysians. The pandemic that plagued the country also had an impact on the education system. Following the closure of educational institutions to break the chain of pandemics, the education sector is implementing virtual learning methods with the use of technology. All types of schools in Malaysia have been ordered to close under the Movement Control Order effective on 18th to 31st March. The same practices go to kindergartens, public and private schools, including day schools, boarding schools, international and expatriate schools, *tahfiz* centres, colleges, GENIUS centres, and other primary, secondary, pre-university educational institutions and teacher education institutions, that all are subject to enforcement.

According to Dr. Mohd Radzi Md Jidin, the current Minister of Education, MOE and Teachers Training Institute (IPG) students who do not return to the village must be managed by the campus administrator and hostel administrator. Students are not permitted to participate in extracurricular activities such as tuition, extra classes, sports training, or co-curricular activities while enrolled in school. This is mainly to prevent the increasing transmission of Covid-19 infection (Astro Awani, 2020b). One of the factors that is constantly stressed in implementing online learning methods is access to the internet because students take classes from their different homes. Internet access is dependent on the availability of internet in their area. Face-to-face learning is restricted by limited movement which makes room for virtual learning. Following on from virtual learning, internet access is required to download learning materials, find lesson-related information, and communicate with teachers and fellow students (Abu Hassan, Zainol Abidin & Hassan, 2021).

All stakeholders, including the ministry, teachers, parents and students must be prepared to completely adapt to virtual distance teaching and learning approaches during the MCO period. Teachers do evaluations and assessments virtually as well. Students face difficulties in obtaining easy access to the internet. It benefits students who have reliable and consistent internet access since they can easily follow online teaching and learning and access teacher-provided learning resources. Students who do not have access to the internet, on the other hand, may find it difficult to commit to following the teaching and learning online. Dropping out of school is also influenced by the location of their residence, which has limited internet access (Ationg, Esa, Othman, & Yusoff, 2021d). Most students in rural areas find it difficult to obtain internet access due to geographical factors such as residential areas surrounded by trees or hills, which make difficult to obtain good and steady internet service.

There have been complaints from parents about internet access issues that have disrupted their children's teaching and learning sessions. According to Associate Professor Dr. Abdul Jalil Ramli, Chairman of the Perlis Parent, Community and Private Involvement (PIBKS), if the internet issue is not rectified students particularly those in rural areas will be left behind (Utusan, 2021). Even the most sophisticated devices cannot bypass the requirement for internet access in order to follow and access online learning. Following the issue of internet connection, which is now a basic requirement of the teaching and learning process, students easily become

bored and discouraged when the learning process is not going well. In the end, students lose interest to follow the lessons.

According to Datuk Seri Mustapa Mohamed, Minister in the Prime Minister's Department (Economy), the outbreak of Covid-19 has increased the awareness among stakeholders about the importance of digitisation including the requirement for students to have internet access in order to pursue teaching and learning online (Berita Harian, 2021). Over RM700 million has been allocated to upgrade existing telecommunications towers, construct new telecommunications towers and further expand high-speed fibre optic networks as part of the government's efforts to modernise digital infrastructure. To achieve digitisation, the government is concentrating its efforts on strengthening digital infrastructure under the National Digital Network Plan (JENDELA) (Hmetro, 2021b). These transformation efforts align with the government's objective of bridging the digital divide between urban and rural areas.

Among the MOE's other initiatives is the establishment of a dedicated educational television station, DidikTV, to ensure that all students in the country have access to a high-quality education (Hmetro, 2021c). The DidikTV network broadcasts all educational news from preschool to Form 6 that is aligned with the MOE curriculum and co-curriculum (Hmetro, 2021c). According to Professor Datuk Dr Abdul Rashid Mohamed of Academy of Professors Malaysia, the existence of the DidikTV channel from Ministry of Educations Malaysia (MOE) presents a feasible alternative for students who have difficulty accessing the internet, particularly those who are less able or live in rural areas (Hmetro, 2021c). This educational television programme is a response to parents' and students' complaints about poor internet connectivity. Taking a look at the MOE's teaching and learning materials, as well as parental feedback. When practically every household has a television, this option is more holistic, and it can be a useful addition to online teaching and learning.

Finally, Ministry of Educations Malaysia uses a variety of programmes to address the problem of poor internet connection among students and educators. Poor internet coverage in rural areas, as well as the high cost of internet access for the B40 group contribute to this problem. Thus, the 12MP puts a focus on bridging learning gaps in order to avoid an increase in child dropout rates, particularly among children in the B40 group and rural groups (Astro Awani, 2021d). The B40 group and rural learning facilities should be prioritised in the 12MP. It is hoped that for the next five years, this approach will help to eliminate the educational achievement gap. All stakeholders understand the critical relevance of reliable internet access to the smooth operation of teaching and learning online. As we prepare to meet this challenge, it is hoped that we will be able to increase educational quality in order to produce good human capital while meeting the expectations of IR4.0 and Society 5.0.

Examinations Rescheduling Issue and Fee Payment Rate Reduction

Examination rescheduling is one of the topics mentioned by Datuk Dr. Mohd. Radzi Bin Md. Jidin in his narrative talk titled Ministry of Education Facing Challenges, which aired on *Berita RTM*. According to Dr. Radzi, neither parents nor kids need to be concerned about the examinations being implemented in school. This is because there are concerns among parents and students about the upcoming examination, which is due to a lack of time for students to prepare for the examination, as well as topics that they have not studied. As a result, Dr. Radzi announced the Ministry of Educations Malaysia's (MOE) decision to reschedule examinations

so that students have time to study before sitting for it. This is because students encounter a variety of difficulties and limits when learning online in the Covid-19 pandemic situation.

According to Mokhtar *et al.*, (2021b), prior to the emergence of the Covid-19 pandemic, face-to-face teaching and learning in schools did not require students to own their own gadgets or devices. However, once the government issued the Movement Control Order (MCO), students do not have any choice but to use their parents' devices or phones to continue the teaching and learning online from home. Not only that, Mokhtar *et al.*, (2021b), added that insufficient internet data requirements contribute to the difficulty of tracking teaching and learning from home throughout the MCO period. Students who have their own devices will not be able to take teaching and learning online if their data allowance is insufficient. This is due to the fact that students must purchase a large amount of data in order to participate in online classes. Some of these data are offered at incredibly expensive rates, making them unaffordable to many students. Such challenges make it more difficult for students to sit for the examination if the original exam date is maintained. However, Dr. Radzi's breaking news on examinations rescheduling provides students with a new ray of hope (Astro Awani, 2021e).

The prospect of public examinations at the upper secondary level is also a priority for the MOE, despite the government's agreement to cancel the Primary School Achievement Test (UPSR) and Form Three Assessment (PT3) for the 2020 school session, the MOE is committed to the implementation of public examinations at higher secondary schools in 2020 specifically *Sijil Pelajaran Malaysia (SPM)*, *Sijil Vokasional Malaysia (SVM)*, *Sijil Tinggi Persekolahan Malaysia (STPM)* and *Sijil Tinggi Agama Malaysia (STAM)* still need to be continued since the assessment of students in examinations is critical in determining their selection and direction in tertiary education. In this regard, the MOE has already made an announcement at an early stage that the SPM and SVM examinations will be postponed to the first quarter of 2021 (Berita Harian, 2020d). The decision to change the date of the 2020 public examinations was taken to allow examination candidates who were affected by the school closure to return to school in early 2021 to make proper preparations before taking the examinations (Ministry of Education Malaysia, 2020).

Upper secondary level public examinations have been rescheduled to a more relevant date; this can provide an opportunity for students going for upper secondary level public examinations to do better preparation so that they can answer their exams in excellent condition. Students require sufficient time to complete a subject's learning topic that cannot be completed due to the Movement Control Order (MCO), which has affected the teaching and learning process. In addition, students require a significant amount of time to review teachings. This is because public examinations at the upper secondary level are critical in deciding students' academic paths in the world of education, the decision to reschedule examinations is extremely beneficial to students. This initiative appears to have instilled in students a new sense of purpose and determination to excel in the SPM examination.

Effective learning, curriculum delivery based on the Assessment Curriculum Standard Document (DSKP), two-way interaction between teachers and students, and parental, administrative and leadership support, contribute to ensuring the continuity of the teaching and learning process while utilising the medium optimally. However, teachers frequently fail to engage students in the teaching and learning online for several reasons such as due to the current situation and the need to consider students' resources (Ehwan Ngadi, 2020). Through

this statement, the difficulty associated with teaching and learning online does not just affect children, but teachers are also significantly impacted by the Covid-19 pandemic. Teachers are fully responsible for ensuring that students have sufficient time to complete a subject's topic prior to the examination. This is because students will be unable to answer to examination questions if the exam topic has not been covered by their teacher.

With the MOE taking the proactive action of rescheduling examinations, teachers would have ample time to prepare their students for examinations. Not only that, teachers can use the time given to create efficient strategies for teaching online in order to motivate students to achieve not just passing grades, but excellent passing grades as well. Teaching and learning online has altered the educational structure, as well as the way teachers teach. At the same time, teachers must keep their passion and energy throughout the extension of this examination, as teachers are the teaching force for students and should set an example for students to continue their studies in the face of the Covid-19 pandemic. Self-motivation can help a person in taking charge of their lives and working hard to better themselves. Individuals with a high level of self-motivation are generally resilient when presented with difficulties or situations loaded with disappointment. This emotional control occurs in all individuals, even those in the teaching profession. The level of emotional intelligence of teachers must be determined in order to understand how it relates to other aspects of the work environment, such as organisational commitment (Nasir & Mansor, 2021).

While the majority of parents agree completely and express gratitude for the examination's rescheduling, there are also some parents who express concerns about the examination's extension. According to Sinar Harian, (2021b), teaching and learning from home is the best approach for reducing the risk of infection among students in the current circumstances due to the presence of several clusters of educational institutions and the recent trend of infection among children through the third wave. While the majority of parents are relieved when the teaching and learning online is prolonged for an additional 25 days, there are worries if the learning period is extended for an extended period of time. If this trend continues, it will undoubtedly provide a significant issue, particularly for students sitting for the *Sijil Pelajaran Malaysia (SPM)* 2021 examination, given that they have had less face-to-face study time at school since last year due mainly to the pandemic.

In addition, Astro Awani, (2020c), state that parents' ability to provide appropriate devices and internet access for their children's learning is a significant challenge. Parents must cater for this need in order to ensure that their children receive an equal education. Therefore, parents must monitor their children while teaching and learning online is being implemented (Moharam, Mokhtar, Othman & Maidin, 2021). Indirectly, this means that parents' technology skills must be strengthened. However, there are also parents who cannot afford to provide necessary technology to their children to participate in online lessons conducted by teachers. Therefore, deferring examinations offer parents time to consider other options for their child to continue attending classes online, such as saving money or seeking government assistance. This alleviates the financial burden on parents who are under the Movement Control Order (MCO) to some extent.

Prospects for Career Advancement for Post-Covid Graduates

As a result of these issues, educational institutions must prepare students not only with technical skills, but also with marketable skills. The most difficult challenge in education today

is producing graduates with academic qualities, technical skill mastery, and a balanced set of marketability skills (Fajaryati & Akhyar, 2020). Employability abilities are the knowledge, skills, and competencies that workers need to enhance their ability to find and keep work, progress in their careers, cope with change, find new jobs if they quit or are laid off, and enter the employment market more easily at various periods of their lives. People who have lots of education and training, a variety of skills, the ability to work in a team, information and communication technology (ICT) skills, problem-solving expertise, and excellent communication will have an easier time finding work. The combination of these abilities allows them to adapt to the situation.

According to the Department of Statistics, the graduate unemployment rate increased by 0.5 percentage points to 4.4 percent in 2020, up from 3.9 percent the previous year. The fate of young people and their chances for the future are major concerns for all of us (Sinar Harian, 2021c). Many of them suffer unemployment and significant obstacles in getting a foothold in the employment market. Many students attend school without the abilities or competencies required in today's economy and society (Sinar Harian, 2019). This indicates that many graduates have their certificates but are unqualified and unskilled for the competitive skilled business sector. There is a mismatch between what is taught at educational institutions and what the labour market requires. Besides that, it shows clearly that the majority of students acquire academic knowledge through lectures and textbooks and are academically equip; however, there are limited opportunities to gain practical experience using machines, equipment, and practical techniques related to the profession and there is a teacher shortage to teach vocational, innovative, entrepreneurial and job skills.

Finally, the absence of collaboration with the private sector has resulted in an outdated curriculum, outdated resources, and obsolete teaching methods. Unemployment among graduates or the inability to obtain employment that is compatible with their academic credentials is a topic frequently discussed among today's youth (Aziz @ Dorashid, 2020). Employers assert that many graduates lack the knowledge, skills, and competencies required by the industry, despite the fact that graduates spend three to five years earning a diploma or bachelor's degree (Ali, Ismail, Suleiman & Tajuddin, 2016). There are a variety of perspectives on this subject; among the issues discussed is the ability of Institutions of Higher Learning (HEI) to provide courses and learning that fulfil industry and student needs (Mohd Shah, Othman, Yusoff, Ationg, Abu Bakar, Esa & Abang Muis 2021).

According to Executive Director of the Malaysian Employers Federation (MEF), Sam Suddin Bataan, many graduates currently pursue specific courses at HEI but end up working outside their qualifications (Marzuki, Abd Rahman, Kaspin, Jamal, Mohd Nor & Othman, 2021). Finally, with the operation of HEIs in stages, the Ministry of Higher Education (MOHE) is able to implement various measures to respond to the call of 12MP. According to Datuk Seri Dr Noraini Ahmad, Minister of Higher Education, there is a TVET Programme Single Rating initiative and a centralised supply and demand medium for TVET (TVET Collaboration Hub, TCH) has been introduced in addition to further strengthening collaboration between industry and academia (Sinar Harian, 2021d). The 12th Malaysia Plan (MPK-12) for education should focus on rehabilitating the education system following the Covid-19 pandemic, enriching education digitisation, enabling the most current teacher training, and offering better educational facilities in line with future education concepts (Othman, Esa, Ationg, Ibrahim, Lukin, & Abdul Hamid, 2021e).

The MPK-12 will also develop digital education plans at the school and tertiary levels to ensure more access to high-quality education. Meanwhile, the Prime Minister stated that the government would increase the number of high-skilled employment through initiatives such as attracting more new high-tech investments. The Graduate Marketability Strategic Plan 2021-2025 was developed to address the issue of labour market mismatch youth (Aziz @ Dorashid, 2020). Furthermore, the National Job Creation Strategic Plan (NJCSP) 2021-2023 will be implemented to enable the government to supply a resilient and highly skilled workforce to the industry (Othman, Mokhtar, Maidin, & Moharam, 2021c). The transition was achieved through training efforts in technical and professional fields with the purpose of educating the target group to become experts in a variety of fields while also developing the necessary skills for future employment especially targeted group such as women and underprivileged people from rural areas (Topimin, Othman, Hassan & Ahmad, 2021).

Conclusion

In general, the Ministry of Education Malaysia (MOE) must tackle these obstacles in order to ensure the seamless implementation of the national education plan, particularly in light of the never-ending Covid-19. This is because not all students and teachers are interested in participating in a particular learning session, each learning approach has its own set of benefits and drawbacks. Furthermore, not all teachers are experienced or interested in conducting online learning sessions because it is difficult for them to assess each student individually, particularly students who are weak in lessons. The requirement for students to return to school during the Covid-19 season on the other hand has both positive and negative consequences for all parties involved. This is because of the numerous obstacles that teachers and students will experience as a result of the Covid-19 virus; students and teachers must adhere to the SOPs issued by the MOH in collaboration with the MOE and the National Security Council (MKN).

However, all parties have a responsibility to play in ensuring the success of the learning session when the school opens with teachers and students collaborating to ensure the school's implementation and to be able to break the Covid-19 chain among students and the community. To facilitate the affairs of all parties, the government and Institutions of Higher Learning (HEI) should put an emphasis on vaccination of students and employees. Teachers should also play a role in developing more creative approaches to Teaching and Learning activities, whether online or face-to-face, particularly in anticipation of the recent regulations imposed under Covid-19 in Malaysia. Despite the problems related with the Covid-19 pandemic that struck our country, teaching and learning online activities continue in a variety of ways, including interactive and proactive tactics.

It is critical that the phased operation of the national education system takes the government's RMK-12 Plan into account. We have seen how over the last 24 months, the country's school and higher education systems have been forced to close due to the Covid-19 pandemic which nearly crippled the national education system. This study's focus should be on the immediate impact of school closures on the country's students, who are experiencing massive learning gaps as a result. The majority of poor children and rural children suffer from extreme dropout rates particularly in basic abilities such as reading, writing, and arithmetic (Othman, Esa, Ationg & Muda, 2021b). According to Ministry of Education data, about 36.9 percent of students did not have learning equipment during the implementation of teaching and learning online (Astro Awani, 2020c). As a result, these students lose a significant amount of learning time.

Thus, the primary objective of the RMK-12 is to bridge learning gaps in order to avoid an increase in child dropout rates, particularly among children in the B40 group and in rural areas. The B40 group and learning facilities in rural areas should be given priority in the RMK-12 (Astro Awani, 2021d). This programme is expected to close the educational achievement gap in the following five years. The three areas of priority are the rehabilitation of post-pandemic national education, the empowerment of digital education, and the improvement of HEI Teaching and Learning online (Othman, Topimin, Ahmad & Hassan 2021d). Therefore, the national education agenda must be resolved through the RMK-12 while not ignoring the ongoing education agenda, such as addressing the issue of inadequate school infrastructure, strengthening the Technical and Vocational Education and Training Programme (TVET), racial integration issues, and expanding educational research activities.

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