

Covid-19 and Unequal Learning

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Introduction

The Covid-19 pandemic has disrupted the livelihoods of every Malaysian, albeit unevenly. Many hope that lives will go back to normalcy soonest and for parents, this includes resuming their children's schooling. School closures since mid-March have suspended formal classroom learning for around 4.9 million students in pre-, primary and secondary schools nationwide¹.

On 15 April, Education Minister Dr Mohd Radzi Md Jidin said that except for the first few days of the Movement Control Order (MCO) (when teaching and learning were disrupted), learning activities have taken place as usual as teachers were advised to find the best alternative ways to deliver lessons². With physical distancing requirements, teachers have generally been shifting their

¹ MOE (2019)

² Harian Metro (2020)

teaching activities from traditional classroom meetings to distance learning either online or offline, utilizing electronic equipments (e-learning).

However, the reality is quite different from the typical daily school routine, and students, parents as well as teachers are still grappling with e-learning. Inadequate equipments and unconducive environments make the adoption of home-based e-learning even harder for both teachers and students. Many students, especially at primary level, are still unfamiliar with digital technologies. For example, some could not set up Google Classroom, or troubleshoot technical issues independently, requiring assistance and guidance from adults, usually parents and teachers.

Moreover, working from home during the MCO entails its own problems for parents as well as teachers, since many teachers are also parents themselves. Many are caught in challenging situations that require striking a balance between work, household chores and care work, as well as enabling and supervising their confined children's learning at home.

Improving e-learning

The level of e-learning adoption during the pandemic seems to be closely linked to a country's level of development: 90% of high-income countries have introduced some form of e-learning while it is slightly lower for upper-middle income countries at 77%. Online learning is the most common platform utilized in high-income countries whereas the use of TV and radio are more common in lower-income countries³.

In comparison to high-income countries, Malaysia's e-learning capabilities, at least at school level, are still at a nascent stage. As it remains unclear when all students will be able to return to school⁴, current modes of e-learning should be improved to be more effective and systematic. The following considers some general aspects of the current situation in order to offer suggestions for urgent improvements.

First, an obvious obstacle is the limited availability of devices to support e-learning. Findings from a survey by the Ministry of Education (MOE) involving close to 900,000 students indicate that 37% of students do not have any appropriate devices. At the same time, only 6% to 9% of students own a personal computer and/or a tablet⁵. Even if a household has a personal computer, many would have to share with other household members for work or study.

³ Vegas (2020)

⁴ Even after the MCO is lifted, the MOE announced that schools will not open immediately and only students that will be sitting for SPM and STPM examinations i.e. Form 5 and Form 6 students will be prioritised to return to school. Source: EdgeProp (2020), Harian Metro (2020)

⁵ Harian Metro (2020), DOS (2020a). Note: The Department of Statistics (DOS) released its own statistic on the percentage of households with access to a computer which was 71.7% in 2019. DOS used a sampling frame which is representative of all households. The differences in the statistics could be due to the following: 1) The MOE survey may use a purposive sampling approach which may better reflect access to computers among students, or based on a convenience sampling approach which may disproportionately capture disadvantaged students 2) the definition of access to computers may be stricter in the MOE survey e.g. students with parents who have a computer may not be considered to have access if only parents use the computer.

While acquiring such devices may not be a problem for well-off families, many households face financial constraints, especially now, with increased unemployment⁶. During tough times, poorer families typically would prioritise putting food on the table over purchasing digital devices and getting access to the internet.

In order to increase device ownership for learning purposes, initiatives to make them more accessible should be implemented. These could include providing grants for purchases of devices and setting up a device loan scheme similar to the existing textbook loan scheme. Additionally, free devices can be distributed to students from low income families in an effort to close the digital divide. A programme similar to the 1Malaysia Netbook Project implemented in 2010 involving distribution of 1.2 million netbooks to less fortunate students should be rolled out again⁷.

Undeniably, this requires government allocations, but any investments that can help our younger generation resume learning without further disruption is a worthy investment for now and far into the future. Additionally, private companies and NGOs should be encouraged to initiate donation drives of new or used laptops for distribution to schools.

A complementary way to further incentivise families to purchase devices is by using the tax relief mechanism. Its current design can be revised to increase the existing relief amount of RM2,500. Given the critical importance of access to such devices and the internet in this digital era, it makes much more sense to group these two items together as an independent category rather than lumping them with other lifestyle expenses such as books and sport equipments.

Second, while ownership of personal computers, including laptops and tablets remains very low, the MOE survey data shows a higher smartphone ownership at 46%. This makes smartphones the most common device utilised by teachers to impart their lessons. However, the organisation and dissemination of information can be improved in various ways.

Using smartphones, teachers typically send messages to the parents to inform them of their children's lessons. Messaging groups often have multiple messages and for parents with several schoolgoing children, these groups can be very messy and troublesome to supervise and keep up. Hence, where applicable, rules should be put in place in the use of messaging groups to avoid overcrowding due to unnecessary messages. For example, administrators should be appointed so that only authorised persons can send messages. Too many parents responding in the groups makes it harder to distinguish important from unimportant messages. As things stand, much scrolling and reading are sometimes needed to find the latest posted materials. It is necessary to establish this message group as a formal platform for communications on the lessons. Informal communication channels between teachers and parents can be set up separately subject to appropriate guidelines.

Given that schooling in Malaysia is dealing with an unprecedented scenario, it is understandable that resources such as teaching materials and homework assigned by teachers are not likely to

⁶ MIER (2020), DOS (2020b)

⁷ The Borneo Post (2012)

be standardised for some time. Presently, learning materials and exercises can be provided via Google Classroom or shared via messaging applications such as Whatsapp and Telegram. However, workloads assigned to students may vary and learning activities also take place for a few, but not all subjects. Often, these are dependent on each teacher's initiatives, discretion and individual preparedness for e-learning. Many more senior teachers have less relevant experience and different capacities and capabilities for effective implementation of e-learning. This has to be improved and teachers should strive to adhere to a predetermined syllabus by the MOE and consistently assign appropriate, not arbitrary workloads to students.

While much of what is discussed above can quickly be improved, direct interactions between teachers and students, and among students are both still lacking. To improve e-learning, teaching assistants or tutors can be assigned to help teachers, students and parents. This can be done by engaging new graduates and others suitable to participate in school tutoring programs, thus addressing graduate youth unemployment at the same time. Each tutor can be assigned to smaller groups of students to whom they can dedicate more frequent and personalized attention.

Third, for a smooth and effective e-learning process, good internet connection is required. Although the national mobile broadband⁸ penetration rate per 100 people was approximately 120% in 2019⁹, the fixed broadband penetration rate—which provides faster and more reliable connectivity¹⁰—was only approximately 8% per 100 people¹¹. Other infrastructural shortcomings, such as the lack of fibre optic networks, is slowing internet speed and undermining connectivity in the country¹². It becomes more urgent now to ensure successful implementation of the National Fiberisation and Connectivity Plan given our increasing dependence on high-quality internet access in all aspects of life.

Aside from these challenges, the free 1GB mobile data provided daily by the government is not adequate to support heavy video streaming or class teleconferencing which exhaust data quickly. This puts children of poor families at a disadvantage as they cannot afford to “top up” data more frequently. Telcos should consider providing additional free mobile data with no restrictions and at no additional cost in order to help teachers, parents and students cope with the current challenges¹³.

Fourth, streaming channels and TV can be better utilised as alternative tools to deliver mass lectures as many teachers may not be able to conduct lessons effectively online. EduwebTV is an online education service provided by the MOE where users can get educational videos to prepare for formal exams. Specific channels are available on YouTube catering to students at different

⁸ Mobile broadband refers to an internet connection tied to a SIM card in a mobile phone. Source: Rachel Gong (2020)

⁹ The penetration rate is above 100% as the number of mobile subscriptions is higher than the population size e.g. a person may have two mobile subscriptions. However, having a penetration rate of at least 100% does not necessarily mean that everyone has a mobile subscription.

¹⁰ Fixed broadband refers to an internet connection typically accessible through a phone line or cable in the home. Source: Rachel Gong (2020)

¹¹ Ibid.

¹² Muhammad Nazhan Kamaruzuki (2020)

¹³ Rachel Gong (2020)

levels with videos sorted by subject¹⁴. However, video streaming is data-heavy, making the free 1GB mobile internet relied on by many households insufficient for streaming long videos.

Recognising that 98.1% of households have TVs¹⁵, starting 6 April, the government rolled out Program TV Pendidikan or Kelas@rumah as an alternative for students with no access to the internet. The television programs can be viewed on TV Okey (channel 146 on Astro¹⁶ and channel 110 on Freeview¹⁷).

Daily programmes are published on the MOE website, with each slot catering to students preparing for different examinations. For example, on a selected day the morning slot at 9.00 am may broadcast Form 1 Mathematics lesson and Form 3 History for the Pentaksiran Tingkatan 3 (PT3) examination, while the afternoon class at 1.00 pm teaches Standard 4 Bahasa Melayu and prepares for the Ujian Pencapaian Sekolah Rendah (UPSR) examination. However, the programmes currently only run for a total of two hours daily and should be extended to cover more subjects and student levels.

Another important platform to consider is radio. In 2018, radio was still a primary information transmitter, reaching about 20 million listeners¹⁸. Subjects which require less visual aids and more story telling, such as history, can be effectively taught through this channel. This would be helpful, especially for students in rural areas without access to the internet.

Disabled and underprivileged children

Unfortunately, the above discussions only highlight challenges faced by students who have the devices and internet access needed for e-learning to begin with. The problems faced by the remaining students who do not own any devices are far more serious and have not been addressed adequately by most non-official accounts. Even if it is true that learning is going on as usual, this is likely to have been effective only for a proportion of adequately equipped students.

In addition, the current initiatives assume that children with special needs can learn as effectively via distance learning. The government must consider the difficulties of learning at home for students with special needs. Besides first opening schools to students preparing for examinations soon, disabled, underprivileged and underperforming students should be prioritised next. Obviously, we should be mindful of the stark disparities among those who benefit most from e-learning.

¹⁴ EduwebTV (n.d.)

¹⁵ DOS (2017)

¹⁶ 5.7 million households or 77% of households have access to Astro. Source: Astro (n.d.)

¹⁷ Freeview is a digital TV service provided for free following the analogue shutdown on 31 October 2019. To provide TV access to all, B40 households get a decoder for free. Source: MYTV Broadcasting (n.d.)

¹⁸ MCMC (2019)

Social mobility and the lasting effects of the crisis

Beyond overcoming the challenges students currently face, we must also be cognisant of the long-term consequences of the crisis on the children's life opportunities, prospects and social mobility.

With parents losing jobs due to the economic downturn, it could potentially result in rising dropout rates, especially among older children who may be under pressure to earn incomes. Additionally, the extended lockdown and concurrent economic pressures could have knock-on effects on children's physical and mental health, either directly or indirectly, through their influence on parental mental health¹⁹. Statistics also suggest disproportionately more mental health problems and burdens in lower-income households²⁰.

Furthermore, the consequences of a crisis could last longer than the crisis itself. Studies that examine the employment of cohorts entering the labour market in the aftermath of the 2008-09 Global Financial Crisis found that they were far more affected than the same age cohorts who started working under better economic conditions. Negative consequences include higher odds of being in low-paying jobs or being unemployed longer, resulting in lower wage levels and slower career progression²¹.

While there has been no similar longitudinal study in Malaysia, social mobility trends are quite telling. Comparing the social standing of the current generation (who generally entered the labour market after the 1997 Asian financial crisis), with their parents' (who lived in an era of rapid Malaysian economic growth prior to the crisis), an intergenerational social mobility study by KRI found the following: while today's generation has a generally higher standard of living, progress probably slowed and social mobility is increasingly constrained due to lacklustre economic growth and the erosion of education and skill premiums²². The crisis caused by the current pandemic would likely make the social mobility prospects for our younger generation even more challenging.

Conclusion

It is important to acknowledge that closure of schools and gaps in teaching and learning activities during this crisis affect our children unevenly. The looming economic downturn following the lockdown will hit those from disadvantaged backgrounds especially harder with longer term consequences. In addition to strengthening broadband penetration, more needs to be done to ensure all children have access to the needed devices, including making devices more affordable/accessible. It is especially urgent to develop high quality digital content, perhaps even translating appropriate foreign materials, and to equip teachers with the skills to more effectively use e-learning technologies.

¹⁹ WHO (2020), Nicolas (2020)

²⁰ IPH (2015)

²¹ Clarke (2019), Sironi (2018), Junankar (2014), Choudhry et al. (2010)

²² Hawati Abdul Hamid et al. (2019)

We need to rapidly scale up technological adoption and bridge the digital divide in e-learning²³. If not undertaken with due haste, the possible adverse long-term impacts on school children will only serve to widen existing inequalities and undermine social cohesion. For society to fully cooperate with government efforts to check the pandemic and adjust to the likely changes as the economy slowly recovers from the Covid-19 crisis, the announced commitment to ensure that no one will be left behind must be seen in matching government actions.

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²³ Whiting (2020)

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