Building Back Better from Unprecedented Changes in Education

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Introduction

Learning has been disrupted for our children as schools are closed as part of the strategies to fight the coronavirus. School closures since mid-March 2020[1] have suspended physical classroom learning for about 4.9 million students in pre-, primary and secondary schools nationwide[2]. Instead, teaching and learning have been delivered through a combination of alternative channels, online platforms mainly, but also television programmes, phone calls, texts and handouts[3]. Despite these efforts, concerns on learning losses remain. This article discusses how distance learning exacerbates inequality in education.

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[1] Schools closed for about six months in 2020. Up to July 2021, schools closed for about five months with plans to reopen in September 2021. Source: Tan (2021), Astro Awani (2021)
[2] MOE (2020)
[3] World Bank (n.d.)

Education inequality before the pandemic

Educational inequality has existed prior to the Covid-19 pandemic[4]. For example, analysis of the Department of Statistics' (DOS) Household Income and Basic Amenities Survey 2014 data shows a correlation between household income and children being out of school. In 2014, the percentage of children[5] from households in the bottom income quintile (B20) was 4.6%. Conversely, only 1.4% of children in the top income quintile (T20) were out of school[6].

The United Nations Children's Fund (UNICEF) "identified [school affordability] as a major cause of inadequate pre-school and upper-secondary enrolment rates."[7] On top of monetary barriers, certain populations face other disadvantages. For example, there are reports of schools, especially in rural areas, lacking basic facilities and having dilapidated conditions[8].

Perhaps unsurprisingly, differences in access to and quality of education have been linked to differences in student achievement. In 2011, Sijil Pelajaran Malaysia (SPM) school average grade[9] for urban students was 8% higher than rural students'[10]. This disparity has been linked to rural schools' limited access to technology and teaching resources, and the utilisation of obsolete teaching materials[11].

Learning issues during the Covid-19 pandemic

Within this context, the Covid-19 pandemic and shift to distance learning have dramatically exacerbated education inequality in multiple ways.

Globally, over 60% of distance learning strategies rely exclusively on online platforms[12], however the digital divide—the differences between groups' access to technology[13]—creates an additional barrier to education. Based on a survey by the Ministry of Education (MOE) involving about 900,000 students, 36.9% of students do not have any appropriate devices (Figure 1). Even if a household has an appropriate device, large households will have to share this device with multiple household members for study, work and leisure, emphasizing the need for 'digital inclusion'[14].

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[4] UNICEF (2019), OHCHR (2019)

[5] Children here refers to persons aged 6 to 16. Source: Redmond, Praino, and Noore Siddiquee (2017)

[6] Redmond, Praino, and Noore Siddiquee (2017)

[7] UNICEF (2019)

[8] Clark-Hattingh (2019)

[9] School average grade is the average grade obtained by all students in a specific school across all subjects in a standardised examination such as SPM.

[10] Exam syndicate (2018)

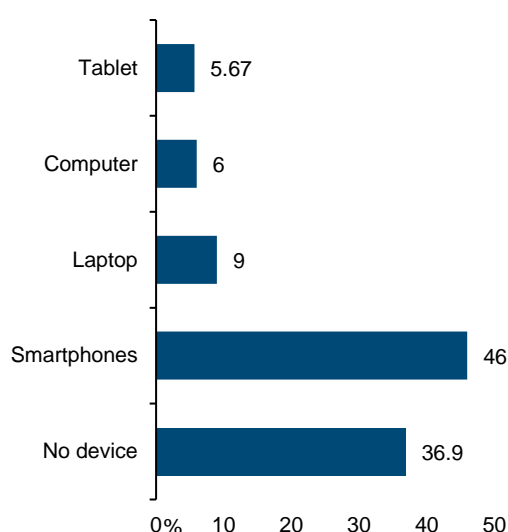[11] Ardi Marwan, Bambang Sumintono, and Nora Mislan (2012)

[12] UNESCO GEM Report (2020)

[13] Wagner and Warren (2020)

[14] Digital inclusion is a broad policy-driven approach that aims to ensure all individuals have access to and use of Information and Communication Technologies. For more information on digital inclusion, refer to KRI (2021).

Good internet connection is also a necessary pre-requisite. Although the national mobile broadband penetration rate per 100 inhabitants was approximately 120% in Quarter 1 2021, the fixed broadband penetration rate—which provides faster and more reliable connectivity—was only approximately 39% per 100 premises[15]. Furthermore, there are stark disparities by location as rates are lower in states such as Kelantan, Sabah and Terengganu and higher in Kuala Lumpur and Selangor (Figure 2).

Figure 1: Percentage of students who own device, 2020

Figure 2: Internet broadband penetration rate by state, Quarter 1 2021

Source: Hayati Ibrahim and Amir Abd Hamid (2020)
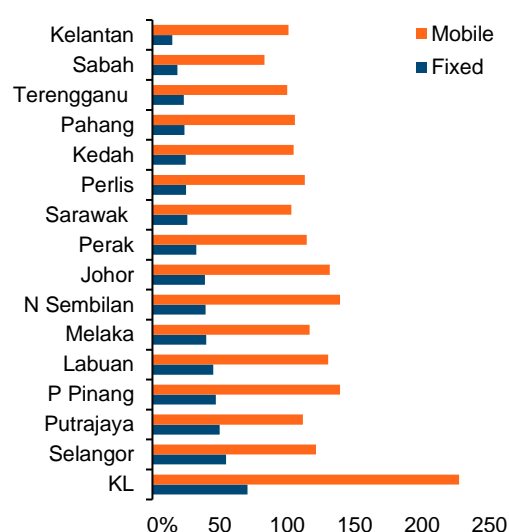
Source: MCMC (n.d.), authors' calculations

Aside from inadequate equipment and infrastructure, unconducive environments and stay-at-home orders complicate the adoption of distance learning. A survey of 500 parents in 16 low-cost flats in Kuala Lumpur conducted in February 2021 to March 2021 found that 83% of respondents want their children to return to school, citing lack of space and inability to supervise children as parents/carers must juggle work, household chores and care work as key challenges in distance learning[16].

Also, while parents, students and teachers may be more familiar with these technologies a year after the onset of the pandemic, without data, we cannot rule out the possibility that some may still struggle. In line with this, emerging issues from distance learning affecting children's wellbeing such as social isolation, cyber bullying and child exploitation online must be considered in policies[17].

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[15] MCMC (n.d.), authors' calculations
[16] Muhammed Abdul Khalid et al. (2021)
[17] Wagner and Warren (2020)

Learning losses and long-term challenges

Despite collective efforts to ensure a smooth learning process, latest evidence from Belgium, the Netherlands, Switzerland and the United Kingdom shows that school closures have resulted in learning losses[18]. In the Netherlands—which provides a "best-case scenario" as the country closed schools for a relatively short 8-week period and has strong infrastructure for online learning—researchers found student performance on a national exam declined by 3 percentile points or equivalent to one-fifth of a school year, with the effect being 60% larger among students from disadvantaged homes[19]. Early findings conform to assumptions that learning losses happened during the pandemic and these losses are much larger for disadvantaged students.

One contributor to these uneven learning losses is wealth. More affluent families are more likely to have the technology, connectivity, books and general capabilities including skills and time to support their children's learning[20]. In contrast, the concurrent economic downturn during the pandemic makes it harder for poorer parents to finance their children's education, jeopardising their children's education prospects[21].

As educational attainment is a determinant of productivity and income, the unequal effect in learning losses may also contribute to worsening income inequality[22]. The impact on inequality transcends income and touches broader dimensions such as gender and children with disabilities. For instance, gains in gender equality could be set back by the pandemic as women have been found to be disproportionately affected in taking up household and care work, and in more extreme cases, fall prey to domestic violence, child marriage and early pregnancies, contributing to higher dropout rates amongst women[23]. Self-learning materials online or through handouts may be inaccessible to children with disabilities who need specific support.

These differences in educational opportunities and subsequent learning outcomes have long-term implications with the poor, vulnerable and marginalised getting the short end of the stick.

Conclusion

Given the abruptness of the situation in early2020, the government, parents, students and teachers were understandably unprepared for the transition to distance learning and were forced to adapt. One year later, it is clear that the situation may not revert to pre-pandemic ways and the education sector must not only compensate for learning losses but also accommodate to the 'new normal'.

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[18] World Bank (n.d.)

[19] Engzell, Frey, and Verhagen (2021)

[20] Wagner and Warren (2020)

[21] MN Shafiq (2010)

[22] Wagner and Warren (2020)

[22] MN Shafiq (2010)

[23] UNFPA (2020)

The government has recognised some of the aforementioned issues and provided relief by providing devices and internet for disadvantaged students, educational content on television and online, and upskilling/training for teachers[24]. Granted, more must be done as these current measures are rife with their own issues[25] and several avenues remain unexplored. One practical option the government could consider is to implement wide-reaching learning recovery programmes such as intensive tutoring programmes to ensure children are able to master reading, writing and counting (*membaca, menulis dan mengira*, 3M) skills before moving forward[26]. These programmes should aim to help students who have fallen behind to catch up.

Importantly, the government must learn from this pandemic, recognise the gaps in the education system and build back better to be better prepared for future crises. It is vital to build a system that can make better use of hybrid learning which utilises a mix of in-person and distance learning[27]. There are different models of hybrid learning, but its main feature is its flexibility and it has the potential to promote inclusive education by understanding the learning environments of and support needed by different groups. If done correctly, we can make up for learning losses in this generation of students and ensure future generations don't fall behind in the face of similar crises.

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[24] Hawati Abdul Hamid and Jarud Romadan Khalidi (2020)

[25] For example, it was announced in late2020 that 150,000 laptops would be distributed to students under the Cerdik initative. As of 24 June 2021, almost seven months into the year, only 52,689 laptops (about one-third of the total number of laptops) were distributed. Source: Asila Jalil (2021)

[26] Hawati Abdul Hamid (2021) proposed an intensive tutoring programme to assist students to master the 3M by employing unemployed graduates as tutors. This programme would also ease youth unemployment during the pandemic.

[27] Refer to Barron et al. (2021) to read more on hybrid learning.

References

Ardi Marwan, Bambang Sumintono, and Nora Mislan. 2012. "Revitalizing Rural Schools: A Challenge for Malaysia." In , 172–88.

Asila Jalil. 2021. "Slow Cerdik Rollout Due to Supply Chain Disruption." *The Malaysian Reserve*, July 5, 2021. https://themalaysianreserve.com/2021/07/05/slow-cerdik-rollout-due-to-supply-chain-disruption/.

Astro Awani. 2021. "61 Peratus Guru Terima 1 Dos Vaksin, Sekolah Buka Pada 1 September - KPM." *Astro Awani*, July 17, 2021. https://www.astroawani.com/berita-malaysia/61-peratus-guru-terima-1-dos-vaksin-sekolah-buka-pada-1-september-kpm-308915.

Barron, Maria, Cristobal Cobo, Inaki Sanchez Ciarrusta, and Alberto Munoz-Najar. 2021. "What Is Hybrid Learning? How Can Countries Get It Right?" World Bank Blogs. April 27, 2021. https://blogs.worldbank.org/education/what-hybrid-learning-how-can-countries-get-it-right.

Clark-Hattingh, Marianne. 2019. "Submission by UNICEF Malaysia to the UN Special Rapporteur on Extreme Poverty Human Rights." https://www.ohchr.org/Documents/Issues/Poverty/VisitsContributions/Malaysia/UNICEF.pdf.

Engzell, Per, Arun Frey, and Mark D. Verhagen. 2021. "Learning Loss Due to School Closures during the COVID-19 Pandemic." *Proceedings of the National Academy of Sciences* 118 (17): e2022376118. https://doi.org/10.1073/pnas.2022376118.

Exam syndicate. 2018. "Achievement Gap between Urban and Rural Schools." https://people.utm.my/sharifah/files/2018/07/page-90.pdf.

Hawati Abdul Hamid. 2021. "Tangani Risiko Buta Huruf Dengan Program Intensif 3M." Kuala Lumpur: Khazanah Research Institute.

Hawati Abdul Hamid and Jarud Romadan Khalidi. 2020. "Covid-19 and Unequal Learning." Kuala Lumpur: Khazanah Research Institute.

Hayati Ibrahim and Amir Abd Hamid. 2020. "Kelas Online: 36.9 Peratus Murid Tak Ada Peranti." *Harian Metro*, July 22, 2020. https://www.hmetro.com.my/mutakhir/2020/07/602634/kelas-online-369-peratus-murid-tak-ada-peranti.

KRI. 2021. "#NetworkedNation: Navigating Challenges, Realising Opportunities of Digital Transformation." Kuala Lumpur: Khazanah Research Institute. http://www.krinstitute.org/Publications-@-NetworkedNation-;_Navigating_Challenges,_Realising_Opportunities_of_Digital_Transformation_.aspx.

MCMC. n.d. "1Q 2021 Communication & Multimedia Facts & Figures." Putrajaya: Malaysian Communications and Multimedia Commission. https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/Q1-2021-C-M.pdf.

MN Shafiq. 2010. "The Effect of an Economic Crisis on Educational Outcomes: An Economic Framework and Review of the Evidence." 2010. https://plu.mx/a/PR_9Ljtss3QMWcpd3eQVbWhoNZabGTxXPF7EE8cjxLY.

MOE. 2020. "STATISTIK BILANGAN SEKOLAH, MURID & GURU." Ministry of Education. July 30, 2020. https://www.moe.gov.my/statistik-menu/statistik-bilangan-sekolah-murid-guru.

Muhammed Abdul Khalid, Zouhair Mohd Rosli, Siti Nur Fatimahtul Maryam Abdul, Endie Shazlie Akbar, and Ilya Amira Harith. 2021. "Families on the Edge Issue 4: Two-Steps Forward, One Step Back: The New Normal for Malaysia's Urban Poor?" Putrajaya: United Nations Children's Fund. https://www.unicef.org/malaysia/media/1976/file/Families%20on%20Edge%20part%204.pdf.

OHCHR. 2019. "Statement by Professor Philip Alston, United Nations Special Rapporteur on Extreme Poverty and Human Rights, on His Visit to Malaysia, 13-23 August 2019." Kuala Lumpur: Office of the High Commissioner for Human Rights. https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=24912&LangID=E.

Redmond, Gerry, Rodrigo Praino, and Noore Siddiquee. 2017. "Child Deprivation in Malaysia: Final Report."

Tan, Vincent. 2021. "Parents in Malaysia Fret over Academic Progress amid Prolonged School Closure, Online Learning." *Channel News Asia*, June 8, 2021. https://www.channelnewsasia.com/news/asia/malaysia-education-home-based-learning-school-closure-covid19-14854924.

UNESCO GEM Report. 2020. "Distance Learning Denied." United Nations Educational, Scientific and Cultural Organization Global Education Monitoring. https://gemreportunesco.wordpress.com/2020/05/15/distance-learning-denied/#more-12982.

UNFPA. 2020. "Malaysia's Covid-19 Recovery Needs to Centre on Women and Girls." UNFPA Malaysia. 2020. https://malaysia.unfpa.org/en/news/malaysias-covid-19-recovery-needs-centre-women-and-girls.

UNICEF. 2019. "Out of School Children." Putrajaya: United Nations Children's Fund. https://www.unicef.org/malaysia/reports/out-school-children.

Wagner, Emma, and Hollie Warren. 2020. "Save Our Education." Save the Children. https://resourcecentre.savethechildren.net/node/17871/pdf/save_our_education_0.pdf.

World Bank. n.d. "How Countries Are Using Edtech (Including Online Learning, Radio, Television, Texting) to Support Access to Remote Learning during the COVID-19 Pandemic." World Bank. n.d. https://www.worldbank.org/en/topic/edutech/brief/how-countries-are-using-edtech-to-support-remote-learning-during-the-covid-19-pandemic.