

Coping with Covid-19: Distance Learning and the Digital Divide

KRI VIEWS 21 /20 | 27 March 2020 | Rachel Gong

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A version of this article appeared in the Malaymail on 27 March 2020 under the title "Coping with MCO: Distance learning and the digital divide."

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Rachel Gong. 2020. Coping with Covid-19: Distance Learning and the Digital Divide.
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Malaysians adjusting to staying at home under the movement control order (MCO) would have quickly realised, if we didn't already know, just how much we rely on having stable, readily available internet access. Although virtual meetings are not a perfect substitute, white-collar workers are likely finding that many aspects of their jobs can be done remotely, and social gatherings over video chats can be quite enjoyable.

However, as the MCO extends a further two weeks, another test of internet infrastructure and applications awaits – namely, how well Malaysian teachers, parents, and students will adjust to distance learning as schools pivot to online classes.

Online resources are available

The Ministry of Education's (MOE) section on education resources and technology (Bahagian Sumber dan Teknologi Pendidikan – BSTP) has prepared online resources for parents, teachers, and students, available to approved users on its [digital learning website](#) hosted by Google. Additional video resources for teachers are available to the public at two MOE-recommended sites,

[EduwebTV](#) whose content is produced in-house by the ministry and [CikgooTube](#) whose content is produced by teachers around the country. In partnership with Google, the MOE is also running [webinars](#) to give teachers a crash course on how to conduct distance learning and online classes.

Of course, the pedagogy of online education is not something that can be taught overnight. It is more than simply digitizing material; it involves [designing a participatory learning experience](#)¹. Nonetheless current circumstances require innovative methods to ensure that primary and secondary school students can continue receiving education during the extended MCO. Even though research shows that [online learning is still not as effective as in-person learning](#)², research also shows that [a prolonged break from school hurts student performance](#)³.

But a digital divide means not everyone can access them

One of the [challenges to effective online education in China](#)⁴ has been unreliable access to the internet and internet-enabled devices. “Many parents cannot afford to buy multiple devices for themselves and their children, even though many of the world’s cheapest smartphones — and most of the fanciest ones, too — are made in China. The nation is blanketed in 4G service, yet the signal is spotty in parts of the countryside.”

Malaysia is likely facing a similar digital divide. Although the national mobile broadband (i.e. an internet connection tied to a SIM card in a mobile phone) penetration rate per 100 people in 2019 was approximately 120%, the fixed broadband (i.e. an internet connection typically accessible through a phone line or cable in the home) [penetration rate per 100 people was approximately 8%](#).⁵

This means that children in lower-income households are less likely to have a device at home with which they can access the internet and are less likely to have enough data with which to download school materials and resources. This problem is likely to be more pronounced in rural areas.

What can be done

Some parents in the Klang Valley report that their children’s teachers have already begun sending assignments and materials to them via Whatsapp and Telegram. Some teachers, knowing that some of their students come from households that cannot afford to buy enough data to stream or download videos, are recording audio messages of their class materials in five minute intervals for students to listen to. Other teachers, who left the Klang Valley to balik kampung during the school holidays prior to the MCO, are now stranded with limited internet access and are struggling to prepare comprehensive online materials for their students.

¹ Carey (2020)

² Woodworth et al. (2015)

³ Baker (2013)

⁴ Zhong (2020)

⁵ Malaysian Communications and Multimedia Commission (2020)

It might be a stretch to consider immediate procurement of internet-enabled devices, for example, previously-used laptops or smartphones, for distribution as [other countries are doing](#)⁶, but there are feasible alternatives to alleviate the digital divide by allowing greater internet access.

Telcos are pitching in by offering various additional mobile data initiatives, for example [Celcom](#) offers free Whatsapp from 8am to 6pm, [Digi](#) offers postpaid consumers 1G of free data daily for use between 8am and 6pm (prepaid customers get extra data only when they reload), and [Maxis](#) offers free data for selected applications. In collaboration with YES and FrogAsia, [the YTL Foundation](#) is providing 40G of free mobile data and online learning materials to all students registered in Malaysian public schools.

However, the conditions attached to some of these initiatives may prevent them from benefiting the people who most need a boost. For example, postpaid subscribers are likely to be customers who have a large bucket of data and/or a fixed broadband connection at home. Conversely, prepaid subscribers are the people who are most likely operating on a tight data budget and who would most value free additional data, yet they do not appear to be the beneficiaries of current initiatives.

Also consider that free access to Microsoft Office 365 is offered from 8am-6pm, which is a definite benefit to office workers working from home, but not one that is likely to be used by daily wage workers who may want access to other websites to look for work or stay updated during the crisis.

In my opinion, telcos should provide additional free mobile data with no restrictions and at no additional cost in order to help teachers, parents, and students cope with the restrictions of the MCO. High take-up rates might increase [the pressure on our internet infrastructure](#)⁷, but this may be a cost we need to bear together. If nothing else, our increasing dependence on high-quality internet access in all aspects of life presents a strong case for ensuring that the [National Fiberisation and Connectivity Plan](#) comes to fruition.

⁶ Issa (2020)

⁷ Datahaus (2020)

References

- Baker, Michael. 2013. "Industrial Actions in Schools: Strikes and Student Achievement." *Canadian Journal of Economics/Revue Canadienne d'économique* 46 (3): 1014–36.
- Carey, Kevin. 2020. "Everybody Ready for the Big Migration to Online College? Actually, No." *The New York Times*, March 13, 2020, sec. The Upshot. <https://www.nytimes.com/2020/03/13/upshot/coronavirus-online-college-classes-unprepared.html>.
- Datahaus, KASPR. 2020. "Slow Internet? How Covid-19 Is Stressing Internet Infrastructure in Your Country." Medium. March 15, 2020. <https://medium.com/@kasprdata/slow-internet-how-covid-19-is-stressing-internet-infrastructure-in-your-country-f94ee6e3b156>.
- Issa, Nader. 2020. "CPS to Buy New Computers for Students to Use at Home, Ramp up e-Learning during Coronavirus Shutdown." Chicago Sun-Times. March 25, 2020. <https://chicago.suntimes.com/coronavirus/2020/3/25/21194851/cps-computers-digital-divide-public-schools-coronavirus-shutdown>.
- Malaysian Communications and Multimedia Commission. 2020. "3Q 2019 Communications and Multimedia Facts & Figures." Malaysian Communications and Multimedia Commission.
- Woodworth, James L., M. E. Raymond, K. Chirbas, M. Gonzalez, Y. Negassi, W. Snow, and C. Van Donge. 2015. "Online Charter School Study 2015." *Center for Research on Educational Outcomes*. Available at <https://Credo.Stanford.Edu/Pdfs/Online%20Charter%20Study20Final.Pdf> 165.
- Zhong, Raymond. 2020. "The Coronavirus Exposes Education's Digital Divide." *The New York Times*, March 17, 2020, sec. Technology. <https://www.nytimes.com/2020/03/17/technology/china-schools-coronavirus.html>.