Singapore Management University

Institutional Knowledge at Singapore Management University

Asian Management Insights

Centre for Management Practice

5-2021

Educating children during Covid-19 and beyond: Revamping formal education for the fourth industrial revolution

Alvin LEE

Follow this and additional works at: https://ink.library.smu.edu.sg/ami

Part of the Curriculum and Instruction Commons, Instructional Media Design Commons, and the Public Health Commons

This Magazine Article is brought to you for free and open access by the Centre for Management Practice at Institutional Knowledge at Singapore Management University. It has been accepted for inclusion in Asian Management Insights by an authorized administrator of Institutional Knowledge at Singapore Management University. For more information, please email cherylds@smu.edu.sg.



Since the World Health Organization declared Covid-19 a pandemic in March 2020, school closures across the Asia-Pacific region have affected some 325 million children. In Southeast Asia, the repeated reopening and closure of schools in countries like Cambodia, and lengthy spells without in-person instruction in Indonesia exacerbate the pre-Covid figure of "53 percent of children in low- and middle-income countries living in Learning Poverty—unable to read and understand a simple text–by 10 times". In the worst case scenario, the World Bank projects up to 0.9 years of lost schooling and some US\$25,000 in lost income over a typical student's lifetime.

Much attention has been paid to addressing the digital divide. The region's lower household income level translates into a lack of necessary information technology (IT) hardware, which paired with low broadband subscription rates⁴ for mostly sub-100-Mbps⁵ connections, makes home-based learning ineffective and challenging, if at all accessible. United Nations International Children's Emergency Fund (UNICEF) Executive Director Henrietta Fore puts it this way: "At least one-third of the world's school children were unable to access remote learning...because of a lack of Internet access, computers or mobile devices."

How to teach?

Despite the technological and economic hurdles, everyone involved-educators, policymakers, parents, and students-agree that blazing broadband speeds and spanking new computers do not add much value if they are merely replicating a physical classroom environment via a webcam. Engaging students and holding their attention over any period of time in a virtual classroom over a Zoom call require skills and adjustments that even the best teacher training systems might have overlooked.

Writing in the *Education Week* journal, Susanna Loeb at Brown University's Annenberg Institute for School Reform highlighted the fact that, on average, K-12 students do worse in online courses compared to in-person courses. With more distractions and less oversight, Loeb suggests the need to "set norms for engagement-such as requiring students to ask questions and respond to their peers—that are different than the norms in the in-person setting".⁷

I can attest to my seven-year-old son's teachers practising what Loeb is preaching during Singapore's circuit breaker in April and May of 2020. But despite their best efforts, getting 30 children barely out of kindergarten to pay attention to a screen not playing a Disney cartoon is akin to herding cats. Parental involvement is therefore crucial in making remote learning for younger children a success, even in an affluent city with widespread broadband coverage like Singapore.

This raises a few issues. While remote-learning training for teachers shot to the top of many governments' to-do list, parents of young children were left to navigate heretofore-uncharted waters by trial and error. With 'building back better' becoming a mantra for global bodies and governments alike, education ministries in ASEAN countries could look into structured programmes that help parents facilitate remote learning. Policymakers should thus get the ball rolling now when remote learning has become a fact of life, instead of waiting for things to get better.

Parental involvement is crucial in making remote learning for younger children a success, even in an affluent city with widespread broadband coverage like Singapore.

What to teach?

The other issue is: how can teachers compensate for the content that was not taught due to Covid-19 school closures? At the time of writing, students in Vietnam had just returned to school after an outbreak in Hai Duong province forced a near-nationwide lockdown. Thailand and Malaysia are only weeks away from forced remote learning while Indonesia still has dozens of 'red zones' where schools are not allowed to open.⁸

ASEAN countries were quick to acknowledge the challenges students and schools face in completing pre-Covid curriculum. Myanmar, for example, made it a point to "prioritise subjects and learning content and trim the curriculum accordingly... [and] be responsive to individual student needs by introducing remedial education and restructuring learning for the remainder of the school year".9

In the unlikely event of schools finding extra time or resources, should these be used to cover curriculum that would likely have little or no bearing on these students when they start work? Even in countries where finances and logistics could be arranged with reasonable efficiency, e.g., Singapore, would it make sense to use that window to teach long division or memorise the periodic table, for example?

Given the aforementioned loss of income over a lifetime, now might be a good time for education ministries to revamp the curriculum for the 21st century. Instead of using future investments in technology to teach existing subjects, why not think ahead and develop syllabi that would be relevant for the Fourth Industrial Revolution? Granted, much of ASEAN is at a developmental and infrastructural disadvantage, but to paraphrase the futurist Alvin Toffler, the 21st century is about being able to learn, unlearn, and relearn. That does not require hardware and money–at least, not a lot–but it does require a commitment to the new vision of what students should get out of formal education.

Governments must step up

In a 2017 White Paper, the Asian Development Bank noted the impending end to traditional 'Factory Asia' and ASEAN's opportunities for leapfrogging that came with the Fourth Industrial Revolution.¹⁰ While the paper was written before Covid-19, the need for focused and coordinated policy ahead of an impending economic reset is reflected in the following three principles. The first is that speed matters; policymakers must rapidly adapt their process of making rules to keep up with technological shifts. Second is 'agility', where regulators need to change course in real time. With Covid-19 wreaking havoc on the 'how' and 'what' to teach, now is the time to

Now might be a good time for education ministries to revamp the curriculum for the 21st century.

examine and update the education system. The third has to do with being experimental and iterative. In much the same vein as 'failing fast' in start-ups, policymakers need to try out different approaches while the Covid-19 situation prevents a return to the pre-2020 normal. The costs of getting things wrong now are lower since almost everyone is grappling with uncertainty.

At the heart of it all, governments must commit to funding and seeing through programmes that address the current challenges while keeping an eye on the future. While nobody wanted a pandemic that has turned the world upside down, it has provided an opportunity for developing countries to revamp their education systems. Students in Laos, Cambodia and Vietnam might not all be well-versed in Internet of Things (IoT) or quantum computing, but they should not be denied the opportunity because of a lack of governmental support.

Does it sound as difficult as herding cats? Try getting a seven-year-old to watch a video explaining why 3+2 is not the same as 3x2.

Alvin Lee

is Editor of Perspectives@SMU at the Centre for Management Practice, Singapore Management University

Reference

- ¹ Pirkka Tapiola, "It is Time to Reopen Southeast Asia's Schools", UNICEF.
- World Bank Group, "Simulating the Potential Impacts of COVID-19 School Closures on Schooling and Learning Outcomes: A Set of Global Estimates", June 2020.
- 3 Ibio
- ⁴ Angelu Almenteros, "More than Three-Quarters of Southeast Asia's Broadband Households still on Speeds below 100 Mbps", S&P Global, October 27, 2020.
- $^{5}\quad ASEAN\,Information\,Centre, "Internet\,Speed\,in\,ASEAN, 2020", July\,23, 2020.$
- ⁶ UNICEF, "UNICEF Executive Director Henrietta Fore's Remarks at a Press Conference on New Updated Guidance on School-related Public Health Measures in the Context of COVID-19", September 15, 2020.
- Susanna Loeb, "How Effective is Online Learning? What the Research does and doesn't Tell Us", EducationWeek, March 20, 2020.
- 8 German-Indonesian Chamber of Industry and Commerce, "COVID-19 Developments in Indonesia", March 9, 2021.
- Myanmar Ministry of Education, "Myanmar COVID-19 National Response and Recovery Plan for the Education Sector". May 11, 2020.
- Asian Development Bank, "ASEAN 4.0: What does the Fourth Industrial Revolution Mean for Regional Economic Integration?" November 2017.