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Why digital poverty deserves greater attention

Inadequate access to digital devices and connectivity persists among lower-income households. Digital divides, unaddressed, contribute to a deepening social divide over time.

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For The Straits Times

Recently, two seemingly unrelated incidents pointed to one very compelling picture of the importance of digital access.

The hours-long outage of Facebook, Instagram and WhatsApp disrupted lives and livelihoods around the world, as people and companies were abruptly cut off from these communication channels they relied heavily upon.

People found themselves disconnected and businesses lost considerable revenue, desperately turning to alternatives such as Telegram, LinkedIn and Zoom.

In Singapore, nine- and 10-year olds must have cheered when told their year-end Primary 3 and 4 examinations had been cancelled. This will free up more time for "curriculum recovery" in the light of disruptions from Covid-19 that saw students switching to home-based learning (HBL) more intensively in the past year.

Although HBL allowed students to continue with their learning despite the pandemic, Minister for Education Chan Chun Sing stressed that it should be used only as a last resort because not all children have conducive home

environments. Issues such as inadequate access to digital devices and connectivity have certainly arisen among low-income households.

CONNECTIVITY INDISPENSABLE

Whether it is for education, business, socialising, recreation, health, religious worship or mundane everyday transactions, the reality is clear – digital connectivity is indispensable today.

These digital infrastructures provide essential services and lubricate daily routines, making our lives run seamlessly and comfortably, especially during a pandemic.

Indeed, it was Covid-19 that starkly revealed the digital gaps that still remain in Singapore, despite its Smart Nation ambitions.

When Singapore imposed a circuit breaker in April last year that required a rapid switch to working from home and HBL, most students had ample resources to engage in online learning, but reports emerged of struggles among those in low-income households.

These included using their parents' mobile phones because they did not own computers, siblings taking turns for HBL because the family owned only one laptop, or tapping neighbours' Wi-Fi to complete their online assignments.

It appears that even after the massive efforts to provide donated and loaned digital devices to needy households, some of them remain under-resourced. In a profiling survey of low-income households in their service boundary from September to December last year, South Central Community Family Service Centre found that out of 573 households with children (18 years old and under) surveyed, 21 per cent did not have Internet connection at home, and 39 per cent did not have laptops, desktops or tablets. By then, some loaned laptops had to be returned and some donated laptops were spoilt.

These troubling accounts raise the question of why Singapore's pre-existing digital readiness and inclusion schemes failed to avert such problems.

Currently, there are two national programmes that enable device and Internet ownership by low-income households: the NEU PC Plus programme that provides households with school-going children and persons with disabilities the opportunity to own a brand new computer at an affordable price; and the Home Access Programme that provides low-income households subsidised fibre broadband connectivity and the option to own devices.

However, our research with social service professionals and volunteers identified several reasons why these programmes were not more widely used.

First, individuals from eligible households were unaware of these digital support programmes, and were therefore unable to explore how to tap them.

Second, some families that needed laptops did not meet certain criteria, such as one household being limited to one laptop. With Covid-19 making online learning the default, limiting the number of devices available for needy households with more than one school-going child can significantly undermine the quality and experience of HBL.

The Infocomm Media
Development Authority, the agency overseeing this programme, has since expanded the eligibility for a second laptop to households with three or more children of school-going age and waived the community service requirement.

Third, some households were deterred from applying by the stringent conditions and paperwork. With NEU PC Plus being offered mainly through schools, the embarrassment and stigma of applying discouraged some students from coming forward. For others, the application process was too complicated and protracted, and they needed help with the application.

Fourth, the lack of awareness of the importance of device ownership for school-going purposes leads to a chicken-and-egg problem: People who do not own computers do not see the need for them, and people who do not see the need for computers do not own them. This was uncovered in previous research, where due to digital illiteracy and financial constraints, low-income households chose to be mobile-first or mobile-only.

These reasons for the programmes' low take-up rate show that digital resourcing needy families through an application-and-means-tested approach is clearly inadequate now that digital devices have

become part and parcel of learning for students.

Consequently, the Ministry of Education (MOE) has brought forward to this year its plans to provide every secondary school student with a learning device. To pay for the devices, students' Edusave accounts can be tapped, with those under the MOE Financial Assistance Scheme being further subsidised so that zero out-of-pocket expenses are required.

This approach to device ownership is more automatic and affordable than the apply-and-be-assessed approach, in effect making digital devices a universal need for all secondary school students. But catering to this group alone may not be sufficient.

ACCESS FOR ALL

Digital resources have become a necessity for learning not just for secondary school students, but also for primary school pupils and adult learners.

In recent interviews with 20 low-income families, we found families with primary school children who needed to turn to donated laptops not only for online classes, but also to download and upload homework via the Student Learning Space portal.

We also found instances of parents borrowing their children's donated or loaned laptops for their own online classes for upskilling and reskilling. We therefore need to accelerate towards universalising digital learning devices for all learners, young and old.

In tandem, we also need to universalise digital education in order to guard against cyber risks, such as online bullying, scams and addictions. Some have raised the presence of such dangers to caution against putting devices into the hands of needy families. Yet, just as there are well-to-do parents and guardians who are negligent or vigilant over their children's use of devices, there are both types of parents and guardians among low-income households.

In fact, device ownership has been an important gateway for these parents to learn about the digital world, helping them to monitor their children's online activities more effectively.

We have also found more parents eager to learn digital skills to raise their children's capabilities, as well as their own. Low-income families also recognise the value of digital competencies. Denying them a resource that has become a basic necessity cannot be the solution to online dangers. Instead, digital literacy training should be actively ramped up to empower and safeguard them against cyber risks.

The United Nations has designated Oct 17 as the International Day for the Eradication of Poverty. With technology becoming more pervasive, we must tackle digital poverty, failing which, digital divides will seed social divides that deepen over time.

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