



Addressing structural challenges in education systems: The educational and technological divide in Cambodia and the Philippines

Jean Linis-Dinco *

Abstract : The deepening digital divide in the Philippines and Cambodia is scrutinised to highlight its impact on educational inequities exacerbated by COVID-19. There is an urgent need for structural reforms that goes beyond posturing and techno-related solutions to ensure equitable access to quality education.

The deepening digital divide in the Philippines and Cambodia offers a glimpse of a grim reflection on the broader class struggle entrenched within the societies at large in these two countries. Both countries have undergone rapid urbanisation centred around large cities such as Metro Manila and Phnom Penh. The digital divide in [both countries](#) goes beyond a [mere gap](#) in access to digital resources. The divide is a symptom of deeply rooted socio-political problems that have plagued the education sector in these countries for decades. And it has even become more pronounced during the peak of the [COVID-19 pandemic](#), wherein schools and institutions were forced to move their operations online. The widening digital gap exacerbates [deep-rooted injustices](#) with

* Jean Linis-Dinco holds a PhD in Cybersecurity (2023) from the University of New South Wales-Canberra, and a Master's in Human Rights and Democratisation in Asia Pacific ([APMA](#)) (2017) from Mahidol University, Thailand. She is a member of the ASEAN Regional Coalition to #StopDigitalDictatorship. She is currently an active member of the Incident Response Working Group of the Global Internet Forum to Counter Terrorism (GIFCT). She is one of the policy analysts of the 6th edition of the [GC Policy Observatory](#).

profound human rights implications in which children from working class backgrounds are left behind.

This situation resonates with the [discussions](#) during the high-level panel of the United Nations Commission for Social Development in February 2024. Assistant Secretary-General for Policy Coordination and Inter-Agency Affairs, United Nations Department of Economic and Social Affairs, Maria-Francesca Spatolisano, emphasised the critical need to ensure that no family is left behind in our swiftly evolving digital world. Even UN Chief António Guterres [confirmed](#) that the digital revolution is a ‘defining force of our era’.

This means addressing the digital divide is essential not only for safeguarding human rights but also for preventing the erosion of educational and economic gains made in recent decades. Closing the digital gap is a long-term investment that does not just enhance, but also level the playing field to ensure that families, particularly those in rural and underserved regions, have the tools to succeed in the digital age.

One of the key factors identified that aggravates educational disparities is **resource allocation**. In highly centralised governments such as that of the [Philippines](#) and [Cambodia](#), decisions-making is left at the national or central level. This leads to a one-size-fits-all approach where the unique needs of different localities may be overlooked. Politically speaking, centralisation tends to favour urban areas as they often serve as political and economic centres. Successes in these areas can readily be showcased by policymakers to demonstrate that they are doing something, which leaves [rural and peripheral regions](#) at a significant disadvantage.

In the context of the education sector in the Philippines, less than 2 percent of Philippines public schools have [free public Wi-Fi](#). Most of those who do not have access are in [remote](#) and [far-flung areas](#). This is even made much more complicated by the high ratio of [1:19](#) students to computers in primary schools in the country. Schools in the Philippines also face problems in relation to electrification. In the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) where the incidence of poverty is at [highest](#) in the country at 37.2 percent, an [estimated 14 percent](#) of elementary schools are still off the grid.

Similarly, in Cambodia, electrification of public primary schools is only at [86.81 percent](#) as of 2022. While this is a significant jump from 75.47 percent from previous year, it underscores the ongoing challenges in achieving universal access to basic utilities essential for modern education. This gap is more pronounced in [rural and remote areas](#), where even basic infrastructure necessary for digital education can be lacking. [UNICEF](#) also found that only 23 percent of students have access to an ICT device and stable internet connection in Cambodia.

These numbers only begin to scratch the surface. Underneath the access to technology, deeper systemic problems contribute to the growing educational and technological divide. Amongst the most critical of these issues is the capability and mastery of teachers to effectively teach. According to [Afkar et al.](#), Filipino teachers use

some of the least effective pedagogical methods in Southeast Asia. Structural challenges in the educational system are evident as teachers in elementary schools are often required to [instruct](#) multiple core subjects like Science, Mathematics, English, and Filipino. This overburdens teachers, impacting their ability to specialise and degrade the quality of education students receive. In Cambodia, the [disparity in teacher qualifications](#) is stark between rural, disadvantaged public schools and urban private schools. On top of this, the large 42 students to one teacher [ratio](#) hinders teachers' ability to offer personalised attention and effectively integrate technology into their classrooms.

This situation highlights how the digital divide includes not just the availability of technology but also the proficiency with which it is employed in educational settings. Victimized by the same education system that failed them, these teachers find themselves in a challenging cycle where they must deliver quality education without the necessary support or resources from the state.

These challenges are compounded by initiatives that [introduce](#) educational technology (EdTech) in classrooms, as seen in recent efforts by the governments of the Philippines and Cambodia. For instance, the Philippines launched projects targeting '[last mile](#)' [schools](#) in several provinces to address educational needs through technology, aiming to make learning more accessible during the disruptions caused by COVID-19.

Similarly, Cambodia embraced [blended learning strategies](#) in response to school closures prompted by the pandemic.

Technological-based measures, though well-intentioned and progressive, are not enough. It is not my intention to demonise these efforts, but addressing systemic problems with superficial solutions is like trying to fix a leaky dam with a piece of tape. This approach may temporarily hold back some of the immediate issues, but it will fail to address the structural integrity of the dam, or in this case the educational sector itself.

Without a genuine and substantial investment in education, these initiatives are doomed to repeat the failures entrenched by the system. Simply distributing laptops or promoting blended learning in remote 'last mile' schools cannot rectify the core issue: education in these countries is [critically underfunded](#). Over time, the pressure builds, and the underlying problems are likely to resurface, possibly in more severe forms. Just as a dam needs a foundational overhaul to ensure its long-term functionality and safety, systemic issues require deep, structural changes to truly resolve the challenges they present.

Consider this: [spending per student](#) in the Philippines decreased from PHP 22,979 (\$413) in 2017 to PHP 19,943 (\$359) in 2021, one of the lowest internationally. In [Cambodia](#), the proportion of GDP allocated to education fell from 3.38 percent in 2020 to just 2.62 percent in 2022, significantly below the recommended public education expenditure of 4 percent of GDP. These statistics underscore a dire neglect of educational funding that perpetuates inequality.

Beneath the glaring gaps in infrastructure and access lies a deep-rooted culture of [corruption](#), a tendency towards exclusivity, and an over-reliance on [private institutions](#) and corporations to address systemic shortcomings. The education sector in the Philippines and Cambodia are begging for structural reforms that go beyond merely posturing and introducing technology into classrooms. Such policy changes must address the root causes of inequality, which in the case of the education sector stem from long-standing issues related to governance.

The conditions we have seen in the Philippines and Cambodia not only violate the right to education as enshrined in various international human rights treaties, but more importantly they deepen the socio-economic divides. In turn, they severely impact students in these regions by limiting their educational and future economic opportunities. The International Covenant on Economic, Social, and Cultural Rights ([ICESCR](#)), Article 13, specifies that ‘education shall be directed to the full development of the human personality and the sense of its dignity, and shall strengthen the respect for human rights and fundamental freedoms’. Yet, the lack of access to essential educational resources in rural areas restricts not only the immediate learning opportunities but also the long-term economic potential of students in these regions, perpetuating a cycle of poverty and inequality.

Addressing the root causes requires **comprehensive policy overhauls** that increases funding and ensures transparency and accountability in how resources are distributed and used. Policies must also be culturally sensitive and inclusive, encouraging educational participation from all sectors of society and ensuring that every child, regardless of background, enjoys the universally recognised right to equitable and inclusive access to quality education.

COVID-19 has presented the Philippines and Cambodia a chance to overhaul a system so inefficient that it has perpetuated educational inequities for generations. The [abrupt shift to online learning](#) underscored the stark digital divide. We have seen how students without access to reliable internet and technology found themselves at a [significant disadvantage](#) to the point that they were unable to participate in digital classrooms and continue their education.

The right to education, as enshrined in [Article 28](#) and [Article 29](#) of the United Nations Convention on the Rights of the Child ([UNCRC](#)) as well as [Article 13](#) of the [ICESCR](#) and [Article 5](#) of the International Covenant on the Elimination of All Forms of Racial Discrimination ([ICERD](#)), is not only about access to education alone. It is about ensuring that each child will have **quality** and **equity** of that education. The COVID-19 pandemic has demonstrated that the existing educational infrastructure and resources in these countries do not meet the demands of a crisis, let alone the requirements of a fair and inclusive education system under normal circumstances. There is no other way forward but to reassess priorities and **allocate resources** to ensure that the rights of all students are upheld.

Both Philippines and Cambodia are at a critical moment to radically transform their educational systems. A human rights-based approach to education reform means that they can begin to dismantle the systemic barriers that have long hindered **equitable access to education**. This includes investing in robust digital infrastructure that reaches every community, revising curricula to make them more inclusive and relevant to diverse populations, and ensuring that teachers are adequately trained and equipped to manage a more **digitised and inclusive educational environment**. As the world gradually moves towards recovery from the pandemic, the question remains—not just ‘if not now, when?’ but also ‘if not us, who?’