

December 2022

# COVID-19 School Closures: Lessons from Disrupted Learning

**PB-22-02** 

#### 1. Introduction

The Philippines was the last country to reopen schools since the start of the COVID-19 pandemic in March 2020. As of November 2022, public schools have resumed face-to-face learning while private schools are still allowed to continue with blended and distance learning. About 27 million students have been affected by partial or full school closures. Nine out of ten children now fall below the minimum reading proficiency level. Prolonged disruptions to learning may lead to irreversible outcomes. Education recovery and transformation must build on the lessons of the pandemic to avoid a generational catastrophe.



The SEPO Policy Brief, a publication of the Senate Economic Planning Office, provides analysis and discussion on important socio-economic issues as inputs to the work of Senators and Senate Officials. The SEPO Policy Brief is also available at www.senate.gov.ph

School closures are one of the public health strategies being used in the Philippines and around the world to combat the Coronavirus Disease 2019 (COVID-19) outbreak. In the context of this paper and according to the United Nations Educational, Scientific and Cultural Organization (UNESCO), schools are considered fully open when they deliver classes exclusively face-to-face for most or all of the student population. Having a hybrid approach where distance learning is combined with reduced in-person class time does not mean that a particular schooling system is fully open. According to UNESCO, while school closures have been effective in reducing COVID-19 transmission, they carry high social and economic costs for people across communities. The impact is particularly severe for the most vulnerable and marginalized students and their families because children from these households are less likely to benefit from remote learning due to lack of electricity, connectivity, devices, and caregiver support. They also experience greater learning losses compared to students of higher socioeconomic backgrounds. The resulting disruptions to face-to-face classes do not only exacerbate already existing disparities in the education system, but also affect other aspects of the marginalized families' lives such as reducing their access to critical services and contributing detrimental effects on child protection outcomes. Schools provide a safety net, and without it, early marriages, teenage pregnancies, and child labor increase.

To avoid further educational losses and other negative economic, social, developmental, and health consequences associated with prolonged school closures, many countries have resumed face-to-face classes. The Department of Education (DepEd) acknowledges this and has been advocating for the resumption of face-to-face classes as early as July 2020. DepEd resumed full face-to-face classes for public schools<sup>1</sup> on November 2, 2022, and allowed private schools to continue blended and distance learning.<sup>2</sup> As of August 2022, around 5.2 million (19.18%) of the 27 million students enrolled last year were fully vaccinated against COVID-19 while 5.6 million students (20.55%) have been partially inoculated according to DepEd. Meanwhile, 92 percent (921,925) of over one million teaching and non-teaching personnel have been fully vaccinated.

To highlight the losses due to school closures and emphasize the need to accelerate learning recovery, this paper aims to: (1) revisit the situation of school closures in the Philippines; (2) analyze the effects of school closures; (3) present the realities of the pandemic that prolong school closures as a public policy; and (4) put forward possible measures to recover learning losses.

<sup>&</sup>lt;sup>1</sup> DepEd Order No. 34. School Calendar and Activities for the School Year 2022-2023.

<sup>&</sup>lt;sup>2</sup> DepEd Order No. 44. Amendment to DepEd Order No. 34.

#### 2. Global Policy Response to COVID-19

The COVID-19 pandemic has had a significant impact on the education sector, with schools of all levels being closed worldwide. To combat COVID-19, more than 180 countries mandated temporary school closures, displacing close to 1.6 billion children and youth at its peak in early April 2020 (World Bank, 2020). According to UNESCO, 1 in 10 countries have fully closed their schools for over 40 weeks. As of the end of February 2022, a majority of countries have fully opened schools, 42 countries have opened schools partially and six countries still have schools fully closed.



#### Figure 1. Duration of Full School Closures, as of February 2022

Source: UNESCO Global Monitoring of School Closures

Compared to countries in East and Southeast Asia, the Philippines had one of the longest school closures, going from March 2020 to October 2020 without any type of formal classes. It implemented a pilot run of limited face-to-face classes in November 2021 after a 20-month school closure. The Philippines returned to full face-to-face classes for public schools on November 2, 2022, while private schools were allowed to continue blended and distance learning.



#### Figure 2. Regional School Closures, Q1 2020-Q1 2022

Source: https://covid19.uis.unesco.org/global-monitoring-school-closures-covid19/regional-dashboard/.

#### 2.1. Policy response in the Philippines

As a preventive action against COVID-19, the Philippines responded urgently by shifting away from face-to-face instruction and toward other modes of instruction, including: (1) modular distance learning (print and digital); (2) online distance learning; (3) blended learning; (4) radio and television; and (6) homeschooling. According to World Bank surveys, only 40 percent of households in the lowest quintile of income have internet access, which is required for online learning. As a result, paper-based modules were more widely used among poorer households. Even among the wealthiest quintile households, only 70 percent have internet access, and only about 45 percent use online live classes as a modality. Additionally, awareness of DepEd's radio and television programming is low, and even among those who are aware of these platforms, utilization is low. Thus, most students are enrolled via modular print, followed by blended learning, online, and finally modular digital. Radio, television, and homeschooling account for a relatively small portion of enrollment.

	SY 2020-2021			SY 2021-2022			SY 2022-2023		
Modality	Elementary	Junior High School	Senior High School	Elementary	Junior High School	Senior High School	Elementary	Junior High School	Senior High School
Modular Print	12,488,311	6,331,505	1,943,495	12,105,359	6,346,450	2,236,746	1,585,158	946,940	403,672
Modular Digital	165,073	220,266	158,191	174,145	257,384	235,644	23,477	31,655	38,482
Online	629,927	716,047	600,064	766,602	761,699	577,523	111,328	104,876	135,787
Education TV	4,536	2,525	220	5,678	1,136	178	936	229	6,236
Radio	50,598	9,311	1,495	54,822	19,931	5,318	5,901	2,826	528
Homeschooling	19,608	5,525	2,183	16,601	4,826	697	11,774	3,479	800
Blended	1,292,751	1,054,212	531,179	1,854,784	1,366,531	768,607	5,291,176	3,279,840	1,821,370
Face to Face							8,158,685	4,056,358	1,772,769
Total	14,650,804	8,339,391	3,236,827	14,977,991	8,757,957	3,824,713	15,188,435	8,426,203	4,179,644

#### Table 1. Enrolment by Modality, 2020-2022

Source: DepEd

Coverage of the internet, television, and radio is also limited in some areas of the country. Learners in remote areas and indigenous cultural communities likely had even more difficulty. Even if gadget donations are possible, mobile phone signals are not available in the majority of communities, and television and radio broadcast signals are occasionally difficult to receive.

According to DepEd, more than 80 percent of public schools in all levels of basic education have functional computers. The total number of computers provided by DepEd in public schools is 1,828,196. The breakdown is 828,112 tablets, 455,677 desktops, 352,791 desktop virtual terminals, and 191,616 notebooks/netbooks. Regarding internet access, 25,150 or 64.2 percent of elementary schools, 6,996 or 72.2 percent of junior high schools, and 4,888 or 67.3 percent of senior high schools have access.

Another policy response is the move to have limited face-to-face classes. It was proposed by DepEd as early as July 2020 and had the support of some senators but then President Rodrigo Duterte rejected it due to the threat of the ever-mutating coronavirus. On September 20, 2021, the pilot implementation of face-to-face classes in low-risk areas was finally approved. A total of 100 public schools and 20 private schools voluntarily participated in the pilot run from November 2021 to January 2022. Parents were required to provide written consent allowing their children to physically go to school.

DepEd Order No. 34 mandated the return of full face-to-face classes. As of November 7, 2022, 44,177 or 97.5 percent of the 45,309 public schools have returned to full face-to-face classes while 1,071 or 2.36 percent are still conducting blended learning. On the other hand, DepEd Order No. 44 allowed private schools to continue blended and full distance learning modes. According to DepEd, out of the 11,701 private schools, 6,867 or 58.69 percent use the blended learning modality, 203 or 1.73 percent use full distance learning while 4,578 or 39.12 percent are back to full face-to-face classes. Meanwhile, DepEd Order No. 50 allowed exemptions from full face-to-face classes such as the usage of classrooms as temporary evacuation centers due to natural disasters and calamities, shortage of basic inputs that cannot be addressed by existing measures, or delays in repairs and construction of school facilities.

The private school sector has invested considerably in online learning technologies and the creation of blended learning modules. The Coordinating Council of Private Educational Associations of the Philippines (COCOPEA) asserts that blended or hybrid learning has been effective in private schools over the past two school years and this can continue to supplement face-to-face classes. Moreover, COCOPEA points out that parents prefer blended learning and do not want the full five days a week of face-to-face classes. Physical distancing can also be more easily implemented with blended learning.

# 3. Consequences of School Closures

School closures affect not only the students, teachers, and their families, they also have far-reaching economic and societal ramifications. Closures of schools in response to the pandemic shed light on a variety of social and economic issues. The consequences are more severe for disadvantaged children and their families, resulting in disrupted learning, compromised nutrition, childcare issues, and financial costs to families unable to work.

# 3.1. Decline in learning outcomes

For a sizable proportion of pupils, learning appears to have been virtually non-existent during school closures (OECD, 2020). Furthermore, a 2022 United Nations Children's Fund (UNICEF) review of existing studies on the simulated and actual observed effects of the pandemic reveals learning declines as a result of COVID-19-related school closures. UNICEF found out that four out of every five countries among the 104 countries and territories covered by existing literature experienced learning losses.

According to the Asian Development Bank (ADB), the efficacy of remote learning is determined by two independent factors: access to remote instruction; and the efficacy of remote learning. Early evidence from the COVID-19 pandemic confirms that students benefited less from remote education than from classroom learning. Additionally, the 2020 and 2021 test scores show the limited efficacy of remote education.

Learning losses can be quantified using learning-adjusted years of schooling (LAYS), which capture both the quantity and quality of education.<sup>3</sup> LAYS combines quantity (years of education) and quality (what children know at a given grade level) into a single summary measure of human capital in a society. In its simplest formulation: LAYS = Average years of schooling × Test scores. Figure 3 shows how LAYS adjust the average years of schooling to account for the quality of learning.

Losses in learning vary by subregion and the duration of school closures. In Southeast Asia, the average loss in learning is equivalent to 0.35 LAYS. Myanmar, Malaysia, and the Philippines have the highest learning loss at 0.77, 0.67, and 0.61 LAYS, respectively (Table 2). This means that the Philippines has lost more than 7 months of learning adjusted schooling. This is on top of an already low 2020 baseline of 7.49 LAYS. To compare, Malaysia has higher learning loss than the Philippines at 0.67 LAYS and has a higher 2020 baseline of 8.89 LAYS. Singapore which had the least amount of school closures has just lost 0.1 LAYS.

<sup>&</sup>lt;sup>3</sup> LAYS are calculated as the number of years of schooling a child can expect to complete by the age of 18, adjusted for the average student achievement of a country. This is quantified through the use of internationally standardized test scores.

#### Table 2. Learning Losses in Southeast Asia

Country	Average loss in LAYS	% decline in LAYS	Baseline LAYS 2020
Southeast Asia	0.35	4.2	8.34
Brunei	0.15	1.58	9.22
Cambodia	0.42	6.21	6.84
Indonesia	0.33	4.28	7.83
Lao PDR	0.21	3.38	6.25
Malaysia	0.67	7.51	8.89
Myanmar	0.77	11.3	6.79
Philippines	0.61	8.11	7.49
Singapore	0.10	0.81	12.81
Thailand	0.22	2.51	8.68
Timor-Leste	0.12	2.73	6.29
Vietnam	0.20	1.86	10.68



Figure 3. Average and Learning-Adjusted

Source: ADB, 2021

Source: Adapted from ADB, 2021

Furthermore, learning is a dynamic process that builds on prior knowledge, such that stagnation results in growing deficits. Closed schools not only impart less new knowledge, but also result in the loss of previously acquired skills upon which additional learning can be built (Hanushek and Woessmann). There is substantial empirical evidence of a "slide" effect during educational breaks, in which children not only do not acquire new knowledge, but also lose previously acquired knowledge. The effect is significant, and it is estimated that students lose knowledge at roughly the same rate as they acquire it throughout the year during a period of school closure (ADB). This means that for each academic year that schools are closed, students lose two academic years of learning. The prolonged disruption to schooling is particularly worrisome especially for countries which are already suffering from poor learning outcomes. A World Bank report, for instance, revealed that before COVID-19 hit, learning poverty<sup>4</sup> in the Philippines was already at 69.5 percent in 2019. This even worsened to 90 percent in 2021, which means that 9 out of 10 children by age 10 years old could not read and understand a simple text.

#### 3.2 Learning losses are worse for the vulnerable

Children from low-income families, who have less access to quality remote education, are more vulnerable to economic hardship during COVID-19 and are more likely to drop out of school as a result of the pandemic. For this reason, students in the poorest quintile experienced 33 percent more learning losses than students in the richest quintile. This resulted in 47 percent higher losses in expected earnings for the poorest students, exacerbating income disparities. Results of the household survey of the World Bank (2021) study reveal that limited access to gadgets and the internet, the child's inability to concentrate, and COVID-19-related stress were all main barriers to effective learning. Other barriers identified include the inability of family members to support the child either due to lack of knowledge about online classes or subjects that the child is studying, or lack of time, lack of physical space or quiet place for studying, and the child not having enough time to study due to chores or work.

Moreover, only 40 percent of households in the bottom quintile of the income distribution have access to the internet, which is crucial for online education. While three-quarters of poor and near-poor households owned at least one smartphone, students from these households spent only an average of 37 minutes per school day studying online via phone. Internet access difficulties, insufficient internet 'load' or mobile data allocation, or gadget sharing with multiple household members were all identified as challenges.

<sup>&</sup>lt;sup>4</sup> The learning poverty rate measures the proportion of children who are unable to read a simple text with comprehension by age 10. It is calculated by combining the share of primary-age children who are out of school with the share who are in school but have not achieved this minimum proficiency in reading by the end of primary.

Finally, the survey discovered that younger children (11 years old) are unable to use distance learning modules effectively without significant assistance from their household members. For example, it was reported that approximately 10 percent of students in grades 6 to 8 were able to use the modules independently, and that students in this age group required an average of 3 to 4 hours of assistance per day, or 75 percent to 100 percent of their total study hours.

# 3.3. Reduction in enrolment

In the first school year of the pandemic, basic education enrolment dropped by almost 800,000, from 26.88 million students in school year (SY) 2019-2020 to 26.09 million students in SY 2020-2021. Enrolees in private schools plunged while public school enrolment marginally increased. In SY 2021-2022, total enrolment rebounded to 27.43 million, even exceeding the pre-pandemic level. In SY 2022-2023, enrolment<sup>5</sup> increased to 27.66 million students (Figure 4). However, more students transferred from private to public schools with the former losing almost a million students when compared with pre-pandemic enrolment.



Source: DepEd

#### 3.4. Suspension of operations of private schools

School closures have put private schools under great financial strain given their already small revenue streams. Reduced fee collection, existing financial obligations on schools (loan payments, rent, and bills), the shift to distance learning, and the costs associated with reopening have left many schools financially vulnerable.

As a result of lower enrolments, a significant number of private schools were forced to close permanently due to the financial consequences of the pandemic on their business (Figure 5). In SY 2020-2021, 1,179 private schools closed while an additional 632 closed in SY 2021-2022. In the latest SY 2022-2023, the number of private schools decreased to 12,212.

In order to help private schools affected by the pandemic, Republic Act No. 11494 or the "*Bayanihan* to Recover as One Act" attempted to address this by allocating PhP600 million for students and PhP300 million for teaching and non-teaching personnel who need assistance in the wake of the COVID-19 pandemic and the community quarantines. However, the amount may not be enough as the Federation of Associations of Private Schools Administrators said that many small private schools are facing closure due to low enrolment in 2022. Additionally, COCOPEA said that the

<sup>&</sup>lt;sup>5</sup> Enrolment for DepEd and private schools. Does not include enrolment in SUCs and LUCs offering basic education.

country's private schools had been struggling because of the pandemic, with around 400 schools having zero enrollment and more students transferring to public schools.







#### 3.5. Impacts on nutrition

Due to school closures caused by COVID-19, the normal distribution channels for school feeding programs have been disrupted, leaving many children without access to vital source of nutrition. During the pandemic, coverage of essential nutrition services (school meal programs, iron and folic acid supplementation, deworming, and nutrition education through hands-on skills) decreased by 30 percent in low- and middle-income countries (Fore et al., 2020).

According to a quasi-experimental study conducted in the Philippines, each additional calorie provided at school resulted in an identical increase in the total calories consumed by the student throughout the day. DepEd revealed that they served approximately 3.5 million learner-beneficiaries through its School-Based Feeding Program for SY 2020-2021. The DepEd Bureau of Learner Support Services distributed nutritious food products and fresh milk to 3,517,807 and 3,136,951 learners, respectively, in more than 33,000 public schools across the country. Food and milk packs have been distributed directly to learners' homes, while in some areas, parents or guardians of learners have been permitted to claim weekly food pack rations along with the learning modules.

#### 3.6. Negative impact on mental health

UNICEF notes that the pandemic has exacerbated pre-existing insecurity and distress among children. The impact is likely worse for those already with mental and emotional health issues. Children and adolescents with learning or cognitive disabilities may be unable to comprehend the situation created by COVID-19.

Tee et al. (2021) in the Journal of Affective Disorders examined the psychological impact of COVID-19 to the general population in the Philippines using a survey. It was found out that during the pandemic's early stages in the country, one-fourth of respondents reported moderate-to-severe anxiety, while one-sixth reported moderate-to-severe depression and psychological impact. Students reported a greater psychological toll, as well as increased depressive, anxiety, and stress symptoms, when compared to employed individuals.

Apart from the impact on mental health, the World Health Organization (WHO) has also pointed out that being out of school increases the risk of teenage pregnancy, sexual exploitation, child marriage, and other threats. The ADB likewise examined the relationship between education and smoking rates, as well as the relationship between maternal

education and child mortality, and found that the long-term increased mortality associated with school closures could be 49 times greater than the number of lives saved by COVID-19 in the modeled scenarios.

# 3.7. Decrease in future income

Education economics research shows that each additional year of schooling increases life income by an average of 7.5 to 10 percent. In other words, a loss of one-third of a school year's worth of learning would result in a roughly 3 percent reduction in the pupils' subsequent earned income in the future.

According to the ADB, a significant effect of reduced education is that students become less productive in the workforce as adults. Their findings for the Philippines indicate that the net present value of lost productivity for kindergarten to Grade 12 (K-12) students following a year of distance learning arrangements is PhP1.68 trillion. A different model in which children repeat the lost year results in even higher costs, as workforce entry and experience-based earnings are delayed.

The majority of losses (PhP1.15 trillion) are incurred by those under the age of 15, who pose the least risk of contributing to epidemic mortality. The ADB also estimates that every Filipino student affected by prolonged school closures stands to lose an estimated US\$155 every year, equivalent to a 4.5 percent earning loss.

The costs of school closure and the resulting loss of learning extend beyond the lower incomes expected of this cohort of students. A less educated/skilled workforce translates into lower national economic growth rates. A loss of one-third of a year of effective learning for just the students affected by the early 2020 closures will reduce a country's gross domestic product (GDP) by an average of 1.5 percent over the remainder of the century, according to historical data. If the reopened schools (which will include new students) fall short of the standard set prior to the pandemic, the subsequent economic consequences will be proportionately greater (Table 3). Globally, the current generation of learners could stand to lose as much as US\$17 trillion dollars in lifetime earnings in present value as a result of school closures, representing 14 percent of today's global GDP (UNICEF, 2022).

# Table 3. Long-Run Loss in GDP due to COVID-19-Induced Learning Loss

Learning loss (school-year equivalents)	In percent of discounted future GDP	In percent of current GDP	GDP decrease in year 2100
0.25	1.1%	52%	1.9%
0.33	1.5%	69%	2.6%
0.50	2.2%	103%	3.8%
0.67	2.9%	136%	5.1%
1.00	4.3%	202%	7.5%

Source: Hanushek (2020)

# 3.8. Cost-benefit analysis

The ADB (2020) finds that the effectiveness of school closures in the Philippines is limited compared with alternative COVID-19 control measures. Costs are staggering and are about 70 times higher than COVID-19 control benefits: PhP768 million per life saved for closure at all levels, PhP366 million per life saved from closure for 15+ year olds, and PhP1.38 billion per life saved from closure for those under 15 years of age.<sup>6</sup>

The study further asserts that if the objective is to minimize mortality, there are alternative policy options by which many more lives may be saved at much lower cost from other health problems. These measures include increasing testing, tracing, and isolation, or introducing paid sick leave.

In terms of the impact on economic activity of reopening schools safely, the National Economic and Development Authority (NEDA) stressed that expanding in-person classes would add PhP12 billion per week to the economy due to the return of services around schools such as transport, dormitories, food stalls, and school supplies stores, among others.

<sup>&</sup>lt;sup>6</sup> This estimate considers the long-term costs of school closures from January 15 to June 5, 2020 to students and short-term costs to parents and teachers, and modelled reductions in COVID-19 mortality for closure at all levels, closure for 15+ year olds, and closure for those under 15 years of age.

#### 4. Recognizing the Realities of the Pandemic

#### 4.1 COVID-19 cases in children

The Department of Health (DOH) data (as of November 16, 2022) show that children 5 to 14 years old are less affected by COVID-19 than other age groups. For ages 5 to 9 years old, cases are 91,500 or 2.31 percent of the 4.02 million cases while deaths are 140 or 0.21 percent of total deaths. The ages 10 to 14 also had relatively low cases at 115,229 or 2.87 percent of total cases while deaths are 210 or 0.33 percent of total deaths. On November 4, 2022, the DOH reported that 3,900 youth aged 12 to 17 got infected with COVID-19 from September 1 to November 3.

While it is uncertain how COVID-19 could potentially affect this population if the restrictions are further lifted, the DOH noted that in countries with greater child mobility, notable increases in child morbidity and mortality were observed especially during the Delta and Omicron waves. In the United States of America (USA), total cases reached more than 1.9 million cases (March 1, 2020 to October 10, 2021) in this age group with a hospitalization rate of 0.5 per 100,000 population (March 21, 2020 to October 23, 2021) and 94 COVID-19 deaths or 1.7 percent of all deaths among US children in this age group (January 1, 2020 to October 16, 2021).

According to a UNICEF review, in-person schooling, particularly when combined with preventive and control measures, had lower secondary COVID-19 transmission rates than other settings and did not appear to have significantly contributed to overall community transmission risks. Much of the risk associated with schools is due to interactions that occur outside of the classroom.

#### 4.2 The need for the vaccination of children

Vaccines are not 100 percent effective at preventing infections with new COVID-19 variants, but fully vaccinated individuals frequently experience mild breakthrough infections. Additionally, vaccinated individuals shed the virus for a shorter period of time, potentially lowering the risk of infection spread to others.

In the Philippines, eight months after launching its COVID-19 vaccination program—initially among health workers the government began immunizing minors aged 12 to 17 against the deadly virus on November 3, 2021. This is after the country's first batch of children aged 12 to 17 with comorbidities<sup>7</sup> received their first dose of COVID-19 vaccine on October 15, 2021 at a number of Metro Manila hospitals. On February 7, 2022, the vaccination of children aged 5 to 11 has started. Around 15.6 million children are in the 5 to 11 age group, while about 12.7 million children are aged 12 to 17.

As of October 24, 2022, 85.2 percent and 36.4 percent of the adolescent and pediatric population, respectively, have been vaccinated with the last dose of primary series. The adolescent and pediatric group with comorbidities has lower vaccination rates even though they are the ones who need them the most at 19.3 percent and 6 percent, respectively (Figure 6).

<sup>&</sup>lt;sup>7</sup> According to the Department of Health, the country has an estimated 1.2 million children aged 12 to 17 who have comorbidities .

#### Figure 6. Overview of COVID-19 Vaccination Status of Philippines' Population (as of October 24, 2022)





#### 5. Conclusion and Policy Implications

Education is a fundamental right of children. It is a great equalizer if all children have equal access to it. However, school closures widened inequalities and further disadvantaged learners due to the barriers to effective learning such as the lack of electricity, limited internet connectivity, insufficient devices, a non-conducive to learning home environment, and the absence of assistance by helpful adults for self-directed learning.

According to the World Bank, UNICEF, and UNESCO, the first step toward learning recovery and acceleration is political commitment at the national level. The Philippine government seems to recognize the cost of disrupted learning to the overall well-being and future opportunities of children, and to the economy as a whole as the Vice-President was tasked to head DepEd as well as the return to face-to-face classes of public schools. Though DepEd originally proposed that all schools return to face-to-face classes already, private schools were allowed to continue with blended and/or distance learning upon their requests in consideration of their investment in online learning technologies. DepEd should however increase its efforts in trying to convince the private sector to fully return to face-to-face classes.

All possible measures to prevent virus transmission in school must be implemented to ensure the safety of children attending face-to-face classes. These are some examples: (1) wearing of mask and other personal protective equipment (PPE) policies for teachers, school staff, and students in accordance with national and local guidelines; (2) enhanced hygiene measures and adequate hand-washing facilities; (3) frequent cleaning of surfaces and shared objects; (4) adequate and appropriate ventilation; (5) cohorting and alternating physical presence to maintain physical separation and small groups; (6) mechanisms for sharing information with parents, students, and teachers; and (7) setting criteria and mandatory procedures for temporary school closure in the event of a COVID-19 outbreak in the area (UNICEF, 2021).

Teachers should be prioritized for COVID-19 vaccination, following frontline health workers and those most at risk, to protect them from community transmission. Vaccination for children should also be fast-tracked.

As face-to-face instruction resumes, it is essential to assess students' current level of knowledge. This may be done through nationwide rapid literacy and numeracy assessments. Remedial education programs should be developed and implemented to address learning gaps based on assessment data. These could include adjustments to the curriculum, catch-up classes, tutorial sessions, and targeted assistance to students with poor learning progress. Socio-emotional learning strategies must be developed to help ensure that every child is ready to learn and catch up.

During the past two years, remote and blended learning methods were implemented to ensure the continuity of education. The same innovations can also be useful for mitigating learning losses and reaching the most marginalized children. Learning continuity can be delivered through blended modalities that are flexible and resilient to disasters and emergencies. It should ensure that disadvantaged students have equitable opportunities to learn and complete their education in the face of disruptions. This requires a strengthened information and communication technology infrastructure and equitable allocation of resources to most marginalized populations.

To close the digital divide, investments must be made, especially for last mile electricity and internet connectivity. The government should look for ways to help the most marginalized children with access to internet or digital devices with learning content. It should provide training on digital skills for learners, parents, and teachers.

An important determinant of student learning outcomes is the competency of teachers both in terms of their subject matter knowledge and instructional methods. Thus, teacher training (pre-service and in-service) should be improved as even in pre-pandemic assessments of teachers, the knowledge of subject matter amongelementary and high school teachers is low in most subjects. Additionally, teachers must be trained in order to design and conduct lessons effectively from a distance. As they are faced with the challenge of getting children back to learning, teachers must be prepared and supported by the government to be able to cope with the complexity of their roles.

Without immediate action and increased investments, the COVID-19 and pre-existing learning crisis may deteriorate into a learning disaster. If physical classes continue to face risks of disruption, an increasing number of children and adolescents, particularly the most vulnerable and disadvantaged, will drop out of school entirely.

The Legislature of the 18<sup>th</sup> Congress has passed into law the creation of the Second Congressional Commission on Education (EDCOM II) and this will be instrumental in providing a comprehensive national assessment and evaluation of the education sector. This assessment will be crucial in crafting transformative, concrete, and targeted reforms for the education sector. While waiting for the reforms that may be initiated by EDCOM II, the government should focus on areas that are already actionable.

Presently in the 19<sup>th</sup> Congress, several legislative proposals have been filed in the Senate which are in line with most of the recommendations in this paper and are a major step in the right direction when enacted into laws. Among the more urgent and relevant measures include the following: Senate Bill No. (SBN) 323 or the Teacher Education for Achievers (TEACH) Act; SBNs 379 and 1795 or the Basic Education Mental Health and Well-Being Promotion Act; SBN 383 or the Digital Transformation in Basic Education Act; SBN 407 or the Basic Online Learning and Distance Education Act; SBN 1009 or the School Modernization, Connectivity and Innovation Act; and SBN 1604 or the Academic Recovery and Accessible Learning (ARAL) Program Act.

#### References

Asian Development Bank. (2021). Learning and Earning Losses from Covid-19 School Closures in Developing Asia.

- Asian Development Bank. (2022). ADB Briefs: How to Recover Learning Losses from Covid-19 School Closures in Asia and the Pacific.
- Aglibot, J. R., Mallari, D. J., Orejas, T., Reyes-Estrope, C., Alipala, J., & Cabreza, V. (2020, October 4). Zambales teachers cross rivers to deliver learning modules. Inquirer.net. https://newsinfo.inquirer.net/1343524/zambales-teachers-cross-rivers-to-deliver-learning-modules.
- Aguilar, K. (2020, September 1). Mental health of students, teachers a 'big challenge' amid pandemic DepEd chief. Inquirer.net. https://newsinfo.inquirer.net/1329506/deped-confirms-one-student-died-by-suicide-says-mental-health-a-big-challengeamid-pandemic.
- Asian Development Bank. (2022, April). Falling Further Behind: The Cost of Covid-19 School Closures by Gender and Wealth.
- Bernardo, J. (2020, August 31). Module delivery, parents answering activity sheets: Challenges seen in distance learning simulations. ABS-CBN News. https://news.abs-cbn.com/news/08/31/20/module-delivery-parents-answering-activitysheets-challenges-seen-in-distance-learning-simulations.
- Casal, M. (2020, August 17). The pandemic is reshaping education, here's how the Philippines is coping. Rappler. https://www.rappler.com/brandrap/tech-and-innovation/coronavirus-reshaping-distance-learning-education-philippines.
- Casilao, J. L. (2020, August 14). Teachers in remote areas struggle to deliver modules. GMA News Online. https://www.gmanetwork.com/news/news/nation/751406/teachers-in-remote-areas-struggle-to-deliver-modules/story.
- CNN Philippines. (2020, October 7). Cayetano, Velasco allies clash over fate of speakership vote sans House session. CNN Philippines. https://www.cnn.ph/news/2020/10/7/Cayetano-Velasco-allies-clash-fate-speakership-sans-House-session-.html.
- DepEd. (2022). Basic Education Development Plan 2030.
- DepEd. (2022). DepEd Data Bits: Data on Electricity Supply.
- DepEd. (2022). DepEd Data Bits: Functional Computers and Internet Connectivity.
- DepEd Order No. 23 (2020). Operational Guidelines on the Implementation of the School-Based Feeding Program for School Year 2020-2021.
- DepEd Order No. 10 (2022). Supplemental Guidelines on DepEd Order No. 031, S. 2021 (Operational Guidelines on the Implementation of the School-Based Feeding Program).
- Dollanganger, C. (2020, October 29). Philippines: The rich and poor divide in distance learning. The News Lens. https://international.thenewslens.com/article/142537.
- Durban, J. & Catalan, R. (2012). Issues and concerns of Philippine education through the years. Asian Journal of Social Sciences and Humanities, 1(2), 61-69. http://www.ajssh.leena-luna.co.jp/AJSSHPDFs/Vol.1(2)/AJSSH2012(1.2-08).pdf.
- Fernandez, D. (2022, August 19). Only 5 million students fully vaccinated vs COVID-19. Inquirer.net. https://newsinfo.inquirer. net/1649640/only-5-million-students-fully-vaccinated-vs-covid-19#ixzz7gpZH0Tuw.
- Fore, H., Dongyu, Q., Beasley D., and Ghebreyesus, T. (2020) Child malnutrition and Covid-19: The time to act is now. The Lancet. Gonzales, C. (2020, June 15). DepEd: Guidelines for streamlined K to 12 curriculum now available online. Inquirer.net. https://news

info.inquirer.net/1291914/deped-guidelines-for-streamlined-k-to-12-curriculum-now-available-online#ixzz6YgF1f3h4.

Hanushek, E and Woessmann, L. (2020) The Economic Impacts of Learning Losses. OECD.

- Hernando-Malipot, M. (2020, August 4). Teachers air problems on modular learning system. Manila Bulletin. https://mb.com.ph/2020/08/04/teachers-air-problems-on-modular-learning-system.
- Kritz, I. (2020, June 11). PH not ready for online schooling. The Manila Times. https://www.manilatimes.net/2020/06/11/campus press/ph-not-ready-for-online-schooling/730998.
- Lalu, G. P. (2020, August 18). Why push for classes when pandemic affects students' mental health? CEGP to DepEd, CHEd. Inquirer.net. https://newsinfo.inquirer.net/1323764/cegp-asks-deped-ched-why-push-classes-when-pandemic-affectsstudents-mental-health.
- Magsambol, B. (2020, April 14). CHED: Colleges, universities free to adjust academic calendar. Rappler. https://www.rappler.com/nation/ched-says-colleges-universities-free-adjust-academic-calendar-2020.
- Mateo, J. (2018, February 3). Philippines still world's social media capital study. Philippine Star. https://www.philstar.com/headlines/2018/02/03/1784052/philippines-still-worlds-social-media-capital-study.
- Mercado, N. A. (2020, September 15). Some students have to share modules due to tight budget–DepEd. Inquirer.net. https:// newsinfo.inquirer.net/1335796/budget-woes-deped-says-some-students-have-to-share-modules-this-school-year.

- Nicholls, A. C. (2020, June 11). Education in time of a pandemic: What students and teachers are in for this coming school year. CNN Philippines. https://www.cnn.ph/news/2020/6/11/COVID-19-2020-school-classes.html.
- Raitzer, D.A. et al. (2020). Cost–Benefit Analysis of Face-to-Face Closure of Schools to Control COVID-19 in the Philippines. Asian Development Bank. https://www.adb.org/sites/default/files/publication/662321/adb-brief-162-cost-benefit-analysisclosure-schools-philippines.pdf.
- Socialprotection.org, World Food Programme, and Oxford Policy Management Webinar: School Feeding programmes amidst the Covid-19 pandemic in Asia and the Pacific.
- Tee M, Wang C, Tee C, Pan R, Reyes PW, Wan X, Anlacan J, Tan Y, Xu L, Harijanto C, Kuruchittham V, Ho C and Ho R (2021). Impact of the COVID-19 Pandemic on Physical and Mental Health in Lower and Upper Middle-Income Asian Countries: A Comparison Between the Philippines and China.
- The World Bank. (2018). Learning-Adjusted Years of Schooling (LAYS). Defining a New Macro Measure of Education.
- The World Bank and Australian Aid. (2021). Philippine Basic Education System: Strengthening Effective Learning during the Covid-19 Pandemic and beyond.
- The World Bank and Australian Aid. (2021). The Impact of the Covid-19 Pandemic on Low Income Households in the Philippines: Impending Human Capital Crisis.
- The World Bank, UNESCO and UNICEF. (2021). The State of the Global Education Crisis: A Path to Recovery. https://www.unicef. org/media/111621/file/%20The%20State%20of%20the%20Global%20Education%20Crisis.pdf%20.pdf.
- The World Bank, UNESCO and UNICEF. (2022). The State of Global Learning Poverty: 2022 Update.
- UNESCO. (2021). School Closures and Regional Policies to Mitigate Learning Loss due to Covid-19: A Focus on the Asia-Pacific.
- UNESCO. (2021). When Schools Shut. Gendered impacts of Covid-19 school closures.
- UNESCO, UNICEF, The Worldbank, and OECD. (2022). From Learning Recovery to Education Transformation. Insights and Reflections from the 4<sup>th</sup> Survey on National Education Responses to Covid-19 School Closures.
- UNICEF. (2021). Covid-19 and School Closures. One Year of Education Disruption.
- UNICEF. (2021). Life in Lockdown: Child and adolescent mental health and well-being in the time of Covid-19.
- UNICEF. (2022). COVID:19 Scale of education loss 'nearly insurmountable', warns UNICEF. https://www.unicef.org/press-releases/ covid19-scale-education-loss-nearly-insurmountable-warns-unicef#:~:text=NEW%20YORK%2C%2024%20January%20 2022,the%20pandemic%20on%20children's%20learning.
- UNICEF, UNESCO and the World Bank. (2022) Where are we on Education Recovery?
- Wang C, Tee M, Roy AE, Fardin MA, Srichokchatchawan W, Habib HA, et al. (2021). The impact of COVID-19 pandemic on physical and mental health of Asians: A study of seven middle income countries in Asia.

This Policy Brief was principally prepared by Rocky Howard D. Yap with inputs from Sector Heads Paolo Neil S. Navata and Maria Victoria M. Evangelista, under the supervision of the SEPO Directors and the overall guidance of its Director General. The views and opinions expressed herein are those of the SEPO and do not necessarily reflect those of the Senate, of its leadership, or of its individual members. For comments and suggestions, please e-mail us at sepo@senate.gov.ph.