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Basic education: Quality is the 'now' frontier

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The last three decades have witnessed more intensive public and private investments in child education. Over the last decade alone, important innovations, such as universal kindergarten education, senior high school (SHS), and mother-tongue-based multilingual education, have been introduced to provide every student an opportunity to receive a globally competitive quality education. But recent international benchmarking exercises have found education quality in the Philippines to be wanting.

This *Policy Note* draws from existing local and international research to present a snapshot of the current state of Philippine basic education, provide a broad overview of the challenges that beset it, and distill some lessons that may guide its future trajectory.

Where are we now?

Impressive school participation

The Philippines has comparable school attendance rates relative to many richer countries. By the time they turn 18 years old, Filipino students are expected to have completed 12 to 14 years of education, the same level as their counterparts in Southeast Asia and even in other wealthier countries, as shown in Figure 1. Data from recent studies also show that attendance rates for basic education are "nearly universal", even among children from poor

Salient Points:

- Basic education attendance and survival rates have improved considerably over the last three decades, but schooling quality remains an important challenge.
- Returns to education are at decent and economically meaningful rates but have been declining over the years.
- Despite gains across several fronts, many present issues hounding basic education have persisted across generations of learners.
- Learning problems persisted because of a lack of a systematic approach to finding empirically validated solutions to address these challenges.
- Addressing current basic education sector challenges requires increased investment while ensuring these resources are utilized wisely and consistently.

families (e.g., Orbeta et al. 2021). This milestone results from efforts to reduce school dropout rates in the country for the past 30 years.

In the early 1990s, only 70 percent of pupils who attended Grade 1 expected to finish elementary school, while only 76 percent of Grade 7 students expected to graduate from (junior) high school. However, by 2020, the cohort survival rates have reached 97 percent for elementary school pupils and 87 percent for junior high school students (NSCB 2001; PSA 2021a). Among primary school-aged children who have dropped out of school, the most common reasons cited were lack of interest, illness or disability, and financial concerns (PSA 2021b).

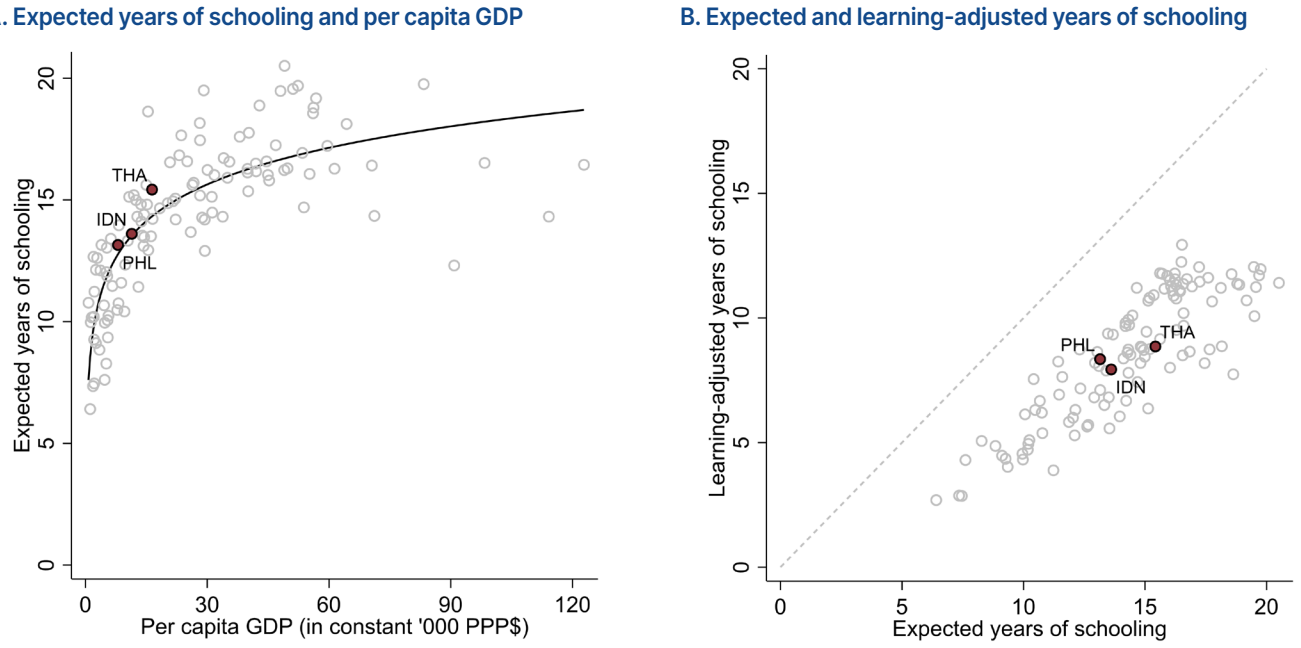
Behind learning potential

Despite the commendable achievement in school attendance, there have been only modest improvements in literacy rates among aged 10–14 years over the same period.

The proportion of early teens who can read and write simple texts has increased from 85 percent in 1994 to 93 percent in 2019. However, the share of those who can read, write, compute, and understand simple texts has increased from 51 percent in 1994 to only 59 percent in 2019 (DECS and NSO 1996; PSA 2021c).

The Philippines has fared below its aspirational and neighboring peers on international large-scale student assessments (LSAs). Filipino students have ranked at or near the bottom in the 2018 Programme for International Student Assessment (PISA), which tested 15-year-olds in math, science, and reading. Similar results have been reported in the 2019 Trends in International Mathematics and Science Study (TIMSS), which measured the performance of Grades 4 and 8 students worldwide. Thus, when adjusted for performance, average schooling in the Philippines translates to only 7–8 years' worth of schooling, or a learning gap of about 6 years (Orbeta and Paqueo 2022).

Figure 1. Expected and learning-adjusted school years and per capita GDP, 2018



GDP = gross domestic product; PPP$ = purchasing power parity in US dollars; PHL = Philippines; IDN = Indonesia; THA = Thailand
Source: World Bank (2023a, 2023b)

Large disparity in the quality of access

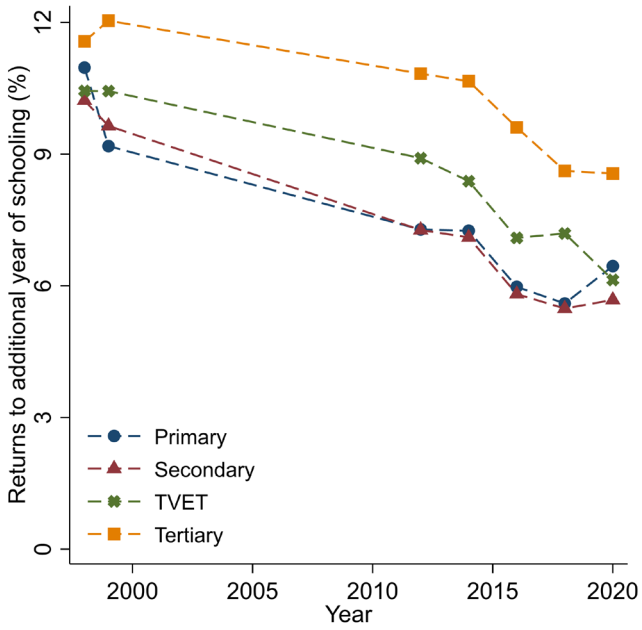
The challenges introduced by the COVID-19 pandemic have highlighted the large disparity in the quality of access to education among children. At the peak of the lockdowns, public schools had resorted to printed modules as the primary learning delivery mode, while private schools were more inclined to utilize online and/or blended methods. These were conditioned partly by the differences in internet access and computing devices across population groups, with children from more affluent households more likely to benefit from more varied learning resources. Children from richer households were also more likely to have better-quality home support through their better-educated parents and guardians (Orbeta 2022).

Decent but declining returns to schooling

As an investment, education still commands attractive rates of return, especially if measured against its social, economic, and financial benefits. In terms of salaries received by graduates, an additional year of basic or vocational education increases wages by about 6 percent annually, while the rate for tertiary education is around 8 percent per year. The social rates of return, which accounts for spillovers to society, such as through lower crime rates (e.g., Bell et al. 2022), increased innovation (e.g., Andersson et al. 2009), and greater civic participation (e.g., Dee 2004), are likely to be higher.

The declining education rates of return across levels, particularly for basic and technical education (Figure 2), may not be entirely surprising, given the expansion in school participation across the years, and may very well reflect past global trends (Psacharopoulos 1981; Psacharopouls and Patrinos 2018). What could be disconcerting, however, is the parallel decline in college rates of return, which may indicate Filipinos not being able to capitalize on high-return high-technology innovations fully. Further, several studies (e.g., Sauler and Tomaliwan 2017) suggest a reversal of the equalizing effect of education in the

Figure 2. Estimated private returns to an additional year of schooling by level



TVET = Technical and vocational education and training
Source: Authors' calculations based on NSO (1999, 2000, 2013) and PSA (2015, 2017, 2019, 2021d)

Philippines, with more recent estimates showing faster growth in the education rates of return for already well-off graduates, which may exacerbate income inequality.

Why are we here?

The results of the international LSAs show the existing ways that the Philippine education system has been failing. While the reasons may be many, complex, and intertwined, the following highlights some of these significant strands.

Prioritized access at the expense of quality

For the past three decades, considerable effort has been placed into reducing school dropout rates in basic education—and there are plenty of successes. However, there appears to be no successful

parallel effort to improve schooling quality. While national achievement tests have continuously been administered over the years, there appears to be no clear link on how the results have helped inform public discussions and improve actual pedagogy and policy (Orbeta and Paqueo 2022). As shown in different international contexts, student achievements do not rely solely on school endowments but are also intimately linked with the quality of nonschool inputs by peers, families, and the broader community (Datcher 1982), which remains largely unexplored local avenues for meaningful interventions.

Underutilized LSAs

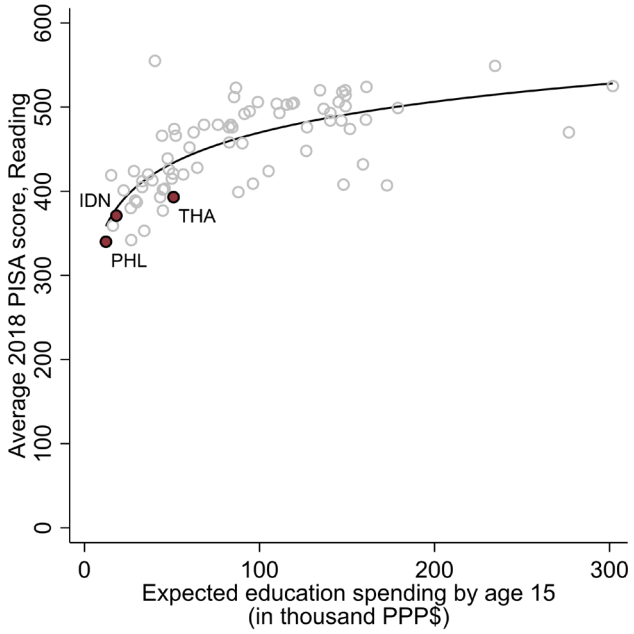
In an ideal setting, the results of national LSAs conducted regularly may serve as an early warning of the state of education quality in the Philippines. With proper design, LSAs may be used to track progress in education quality and gauge the effectiveness of different learning interventions across time. However, the past national achievement tests have generally not been designed to allow such comparison over cohorts of test takers or the results prominently discussed to inform public discourse or policy. The recent international LSAs, PISA and TIMSS, were rude wake-up calls on the country's current state of education affairs (Orbeta and Paqueo 2022).

Underinvested in education

The Philippines has considerably expanded its education spending per capita since the 1990s, surpassing even the growth in per capita income. Despite prioritizing education in the government budget, the country's public education spending remains below its Southeast Asian peers. Indeed, in a recent analysis, countries that performed poorly in the recent PISA, such as the Philippines, have invested relatively less in schooling per person (Abrigo 2021), as shown in Figure 3.

Such underinvestment may be seen in the classroom-to-student ratios. While the Philippines has achieved its targets at the national level in the previous *Philippine Development Plan* to lower this ratio to about 40 students per classroom, there remain regions where average classroom-to-student ratios remain high, such as the National Capital Region and Region IV-A, with 48 students per classroom, and Bangsamoro Autonomous Region in Muslim Mindanao, with 54 students per classroom (Navarro 2022).

Figure 3. Education spending by age 15 and average PISA score on reading



PISA = Programme for International Student Assessment; PHL = Philippines; IDN = Indonesia; THA = Thailand; PPP$ = purchasing power parity in US dollars
Source: Abrigo (2021)

Learning environments also differ materially across schools in the country. While school electrification is nearly universal, only about two-thirds of schools have access to the internet, which puts the Philippines behind most of its neighbors, including Viet Nam and Lao PDR (Navarro 2022). A cross-country study by the United Nations Children's Fund and the World Health Organization (2022) showed that only 45 percent of Philippine schools had basic drinking water services, 74 percent had basic sanitation services, and 61 percent had basic hygiene services.

Unintentionally undermined private schools

The government plays an important role in delivering education services, especially in areas where private sector participation is nonexistent. However, expanding public schools may crowd out private school enrollment in localities where private schools are available (Jimenez and Sawada 2001). Indeed, while the Philippines has one of the largest and longest-running public-private partnerships in education around the world through its voucher program (Jimenez et al. 2011; Termes et al. 2020) and despite private schools generally providing better quality services at cheaper operations costs than public schools (Jimenez et al. 1991; Jimenez et al. 2011), the share of private schools in total enrollment has been declining over the last five decades (Orbeta and Paqueo 2022), with a significant number of private schools even closing operations in recent years (PSA 2021a).

Failed to properly implement good programs

Many promising education interventions rooted in sound international evidence base have been hampered by poor implementation. One such intervention is the mother-tongue-based multilingual education (MTB-MLE) of the Department of Education (DepEd). Synthesis studies (e.g., Ball 2011; Kim et al. 2020) have underscored the large positive impacts of teaching children in the language they understand. However, realities on the ground, such as the limited availability of learning materials in local languages, the conceptual confusion among implementers and stakeholders, and the richness of local languages available across the regions, have greatly challenged the MTB-MLE implementation (Monje et al. 2021). Unfortunately, this is not unique to MTB-MLE, as documented in other theoretically meaningful interventions, such as the implementation of the SHS (Brillantes et al. 2019) and teacher incentives program (Albert et al. 2019).

How do we move forward?

Improving education quality without losing past gains in democratizing access is paramount. But achieving this goal may not be very straightforward.

Develop a system of generating and utilizing locally validated solutions to learning problems

While international experience may be abundant, these lessons are often context-specific and may not be directly translatable to the Philippines' peculiarities. Unfortunately, research on which inputs of the education production function (namely, school, individual and households, and community factors) have a greater influence on student achievement in the Philippines remains in short supply. Finding these effective levers using the country's own experiences based on credible data should be part of the ensemble of strategies moving forward.

Along the same veins, building a culture of evaluation and learning from education initiatives is crucial. This strategy entails not just providing resources for education services but also assessing how these are transformed into learning resources, whether they are delivered where needed, and if these produce the desired learning outcomes. Classrooms are natural laboratories to facilitate student learning and generate new insights for teachers and administrators to improve schooling outcomes.

Still part of this ensemble, a clear set of indicators for quality must be identified (e.g., the proportion of enrolled students meeting the minimum level of proficiency). Reform initiatives and budget allocation should be consistently measured by their marginal contribution to these indicators' improvement. The information on the marginal effectiveness of reform initiatives should be widely disseminated and updated as new evidence is produced. Such undertaking intrinsically requires the timely availability and accessibility of quality-assured data provided at the appropriate level of disaggregation. This would allow different stakeholders to contribute to building the local evidence base to guide education policy in refining current practices and proposing future interventions.

The bottom line is that the country must invest more wisely and consistently. But it needs better empirically validated guidance in doing so.

The following are some promising evidence-backed education investment options that could be considered in the near term.

Develop remedial programs for lagging students

A great majority of students have below-minimum proficiency levels. This reality calls for a systematic remedial program to improve student performance, especially for those lagging. A promising intervention used in other countries is "teaching at the right level", which (1) recognizes differences in student abilities and learning stages and (2) provides appropriate interventions specific to the student's current learning levels. Such interventions have been proven to be both effective and scalable (Banerjee et al. 2017).

Leverage technology for more student-centered education

Personalized education may promote better learning outcomes, but it is rather expensive. Technology promises to deliver more targeted and personalized education more efficiently and effectively (Major et al. 2021). It must be underscored, however, that the better use of technology is not to mimic passive learning through lectures but to deliver content that promotes learner-centered education, increases interaction between teachers and learners, and enables greater learners' control of their education.

Strengthen private school participation

The DepEd's Education Service Contracting for junior high school, the Senior High School Voucher Program, and the Joint Delivery Voucher Program for Technical-Vocational-Livelihood Specialization have been documented to promote efficiency, choice, and diversity of providers while reducing congestion in junior high schools, expanding access to better performing and better equipped private facilities at a fraction of per-student public subsidies to public schools (Orbeta and Paqueo 2022). Expanding these programs further, considering differences in private schools' qualities and absorptive capacities, may be a cost-effective way of addressing several extant issues on education access and quality. While there have been considerable positive experiences with these programs, there is a lack of a well-articulated long-term framework and plan that can guide future implementations and investments.

Address implementation issues of good programs

When implementation issues arise, there is a tendency to completely reverse even logically plausible programs. This approach disregards the careful analyses and reasons that originally convinced policymakers and implementers to introduce these programs. A more rational response would be to address the implementation issues directly. A program should be terminated only when the expected results are consistently not achieved despite proper implementation. It is important to note that weaknesses in implementation do not necessarily mean the program design has failed. By prematurely reversing promising programs due to implementation challenges, the country misses out on valuable opportunities to learn what works and what does not. In the case of MTB-MLE and SHS programs, a more reasonable approach to implementation problems is to address the implementation issues rather than completely reverse them (see Brillantes et al. 2019; Monje et al. 2021).

References

Abrigo, M.R.M. 2021. If you pay peanuts, you get monkeys? Education spending and schooling quality in the Philippines. PIDS Discussion Paper Series 2021-27. Quezon City, Philippines: Philippine Institute for Development Studies. https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps2127.pdf (accessed on May 15, 2023).

Albert, J.R.G., R.U. Mendoza, J.S. Cuenca, G.A. Opiniano, J. Decena-Monje, M.A. Pastor, and M.S. Muñoz. 2019. Process evaluation of the Performance-Based Bonus (PBB) scheme. PIDS Discussion Paper Series 2019-15. Quezon City, Philippines: Philippine Institute for Development Studies. https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1915.pdf (accessed on May 15, 2023).

Andersson, R., J.M. Quigley, and M. Wilhelmsson. 2009. Urbanization, productivity, and innovation: Evidence from investment in higher education. *Journal of Urban Economics* 66(1):2–15.

Ball, J. 2011. *Enhancing learning of children from diverse language backgrounds: Mother tongue-based bilingual or multilingual education in early childhood and early primary school years.* Victoria, BC: Early Childhood Development Intercultural Partnerships, University of Victoria.

Banerjee, A., R. Banerji, J. Berry, E. Duflo, H. Kannan, S. Mukerji, M. Shotland, and M. Walton. 2017. From proof of concept to scalable policies: Challenges and solutions, with an application. *Journal of Economic Perspectives* 31(4):73–102.

Bell, B., R. Costa, and S. Machin. 2022. Why does education reduce crime? *Journal of Political Economy* 130(3): 732–765.

Brillantes, K.D.B., A.C. Orbeta Jr., K.A. Francisco-Abrigo, E.M. Capones, and J.B.B. Jovellanos. 2019. Status of senior high school implementation: A process evaluation. PIDS Discussion Paper Series 2019-13. Quezon City, Philippines: Philippine Institute for Development Studies. https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1913.pdf (accessed on May 15, 2023).

Datcher, L. 1982. Effects of community and family background on achievement. *The Review of Economics and Statistics* 64(1):32–41.

Dee, T.S. 2004. Are there civic returns to education? *Journal of Public Economics* 88(9–10):1697–1720.

Department of Education Culture and Sports (DECS) and National Statistics Office (NSO). 1996. *1994 Functional Literacy, Education and Mass Media Survey.* Pasig City and Manila, Philippines: DECS and NSO.

Jimenez, E., B. Hofman, E. Velez, and H.A. Patrinos. 2011. *Philippines: Private provision, public purpose: A review of the government's education service contracting program.* Washington, DC, and Pasig City, Philippines: World Bank and World Bank Office Manila.

Jimenez, E., M.E. Lockheed, and V. Paqueo. 1991. The relative efficiency of private and public schools in developing countries. *The World Bank Research Observer* 6(2):205–218.

Jimenez, E. and Y. Sawada. 2001. Public for private: The relationship between public and private school enrollment in the Philippines. *Economics of Education Review* 20(4):389–399.

Kim, Y-S.G., H. Lee, and S.S. Zuilkowski. 2020. Impact of literacy interventions on reading skills in low- and middle-income countries: A meta-analysis. *Child Development* 91(2):638–660.

Major, L., G.A. Francis, and M. Tsapali. 2021. The effectiveness of technology-supported personalised learning in low- and middle-income countries: A meta-analysis. *British Journal of Educational Technology* 52(5):1935–1964.

Monje, J.D., Orbeta, A.C. Orbeta Jr., K.A. Francisco, and E.M. Capones. 2021. 'Starting Where the Children Are': Process evaluation of the Mother Tongue-Based Multilingual Education Program implementation. Research Paper Series 2021-02. Quezon City, Philippines: Philippine Institute for Development Studies.

National Statistical Coordination Board (NSCB). 2001. *Philippine statistical yearbook 2001*. Makati City, Philippines: NSCB.

National Statistics Office (NSO). 1999. Annual Poverty Indicators Survey 1998. Survey data. Manila, Philippines: NSO.

———. 2000. Annual Poverty Indicators Survey 2001. Survey data. Manila, Philippines: NSO.

———. 2013. 2012Q1 Labor Force Survey. Survey data. Manila, Philippines: NSO.

Navarro, A.M. 2022. School infrastructure in the Philippines: Where are we now and where should we be heading? PIDS Discussion Paper Series 2022-10. Quezon City, Philippines: Philippine Institute for Development Studies. https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps2210.pdf (accessed on May 15, 2023).

Orbeta, A.C. Jr. 2022. Basic education during the COVID-19 pandemic: What do enrollment by learning modality and household characteristics tell us? In *The Philippine's response to the COVID-19 pandemic: Learning from experience and emerging stronger to future shocks,* edited by C.M. Reyes. Quezon City, Philippines: Philippine Institute for Development Studies.

Orbeta, A.C. Jr., K.A.M. Melad, and N.V.V. Araos. 2021. Reassessing the impact of the *Pantawid Pamilyang Pilipino* Program: Results of the third wave impact evaluation. PIDS Discussion Paper Series 2021-05. Quezon City, Philippines: Philippine Institute

for Development Studies. https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps2105.pdf (accessed on May 15, 2023).

Orbeta, A.C. Jr. and V.B. Paqueo. 2022. Philippine education: Situationer, challenges, and ways forward. PIDS Discussion Paper Series 2022-23. Quezon City, Philippines: Philippine Institute for Development Studies. https://pidswebs.pids.gov.ph/CDN/document/pidsdps2223.pdf (accessed on May 15, 2023).

Philippine Statistics Authority (PSA). 2015. 2014Q1 Labor Force Survey. Survey data. Quezon City, Philippines: PSA.

———. 2017. 2016Q1 Labor Force Survey. Survey data. Quezon City, Philippines: PSA.

———. 2019. 2018Q1 Labor Force Survey. Survey data. Quezon City, Philippines: PSA.

———. 2021a. *Philippine Statistical Yearbook 2021*. Quezon City, Philippines: PSA.

———. 2021b. Annual Poverty Indicators Survey 2020. Survey data. Quezon City, Philippines: PSA.

———. 2021c. 2019 Functional Literacy, Education and Mass Media Survey. Quezon City, Philippines: PSA.

———. 2021d. 2020Q1 Labor Force Survey. Survey data. Quezon City, Philippines: PSA.

Psacharopoulos, G. 1981. Returns to education: An updated international comparison. *Comparative Education* 17(3):321–341.

Psacharopoulos, G. and H.A. Patrinos. 2018. Returns to investment in education: A decennial review of the global literature. *Education Economics* 26(5): 445–458.

Sauler, M.M. and M.F. Tomaliwan. 2017. Returns to education in the Philippines. 2017 DLSU Research Congress proceedings. Manila, Philippines: De La Salle University.

Termes, A., D.B. Edwards Jr., and A. Verger. 2020. The development and dynamics of public-private partnerships in the Philippines' education: A counterintuitive case of school choice, competition, and privatization. *Educational Policy* 34(1):91–117.

United Nations Children's Fund (UNICEF) and World Health Organization (WHO). 2022. *Progress on drinking water, sanitation and hygiene in schools: 2020–2021 data update.* New York, NY: UNICEF and WHO.

World Bank. 2023a. World development indicators. Database. Washington, DC: World Bank. https://databank.worldbank.org/source/world-development-indicators (accessed on May 15, 2023).

———. 2023b. Learning-adjusted years of schooling. Database. Washington, DC: World Bank. https://genderdata.worldbank.org/indicators/hd-hci-lays (accessed on May 15, 2023).

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