

Chapter 6

Approaches to Improving Teacher Quality and Effectiveness: What Works?



Clarissa Isabelle Liboro Delgado, Elizabeth Eder Zobel,
and Margarita Liboro Delgado

Abbreviations

COVID-19	coronavirus disease
DepEd	Department of Education
HMO	health maintenance organization
ICT	information and communication technology
LAC	learning action cells
MIT	Massachusetts Institute of Technology
PISA	Programme for International Student Assessment
RCT	randomized control trial
SAS	Sa Aklat Sisikat Foundation, Inc
TaRL	Teaching at the Right Level
TFP	Teach for the Philippines

6.1 Who Are We?

Over the past 2 decades, Teach for the Philippines (TFP) has developed a multicomponent intervention strategy designed to improve public school teacher

C. I. L. Delgado (✉) · E. E. Zobel · M. L. Delgado
Teach for the Philippines, Makati, Philippines
e-mail: clarissa@teachforthephilippines.org

E. E. Zobel
e-mail: lizzie@teachforthephilippines.org

M. L. Delgado
e-mail: margarita@teachforthephilippines.org

quality and effectiveness. TFP is a nongovernment organization established in 2012, following its work with the Sa Aklat Sisikat Foundation (SAS), which was formed in 1999. SAS started with a single-component grade 4 reading program that focused primarily on teacher training in functional literacy. The foundation later expanded its offering to include management training for school principals as part of efforts to foster enabling environments for teachers to implement progressive methodologies.

The SAS Foundation demonstrated a “statistically significant, positive impact” on students’ functional literacy immediately, according to a 2009 randomized control trial (RCT) on the SAS reading program in Tarlac province conducted by the Abdul Latif Jameel Poverty Action Lab of the Massachusetts Institute of Technology (Linden et al. 2013). The survey affirmed that the reading program had lasting effects in many cases from 30 days to 1 year after the intervention. However, despite strong evidence supporting its effectiveness, SAS was not replicated nationally, as the public school system does not necessarily always adopt evidence-based strategies to increase learning outcomes. Moreover, because of the high turnover of education secretaries in the Philippines, the system’s capacity to deliver a consistent reform agenda for generations of students is hindered. In the absence of a sustained national agenda, the system devolves its accountability to the simplest and easiest metric: access to education. In the process, it disregards the more urgent need to focus on student learning outcomes.

Achieving the long-term goals of improving the quality and relevance of an education agenda requires coherent policies sustained over considerable time. Given these circumstances, there was a need, in our view, to re-examine the program design of SAS. While the work of SAS had initially focused on increasing government teachers’ capabilities, we understood the need to evolve from a single-component intervention to a multicomponent model that would deliver systemic change. “Multicomponent” is defined as including interventions that address both access to education as well as improved delivery in education services. It was with this purpose in mind that TFP was established.¹

¹To generate broader systemic changes, TFP works closely with policy makers, specifically the Department of Education (DepEd), under which the Philippine public school system falls. The DepEd secretary has broad authority to shape the public school system’s reform agenda, which extends to the language of instruction, minimum required competencies, and curriculum design. Ideally, the education secretary serves concurrently with the administration in office for a 6-year term. Historically, however, the average term of a secretary of education in the Philippines is 9 months. In TFP’s 21 years of involvement in public education, it has worked with 10 education secretaries (Delgado 2018). The notable exceptions to this are Armin Luistro (2010–2016), who served under President Benigno Aquino III, and the current Leonor Briones under President Rodrigo Roa Duterte (2016 to the present).

6.1.1 Core Programs

Teach for the Philippines offers a 2-year leadership development program aimed at developing young Filipinos passionate about nation building through education into teachers who can significantly improve student learning outcomes, as well as leaders who can spark positive changes in public school communities across the Philippines. The unique TFP model constitutes three core programs: Teacher Fellows, Teacher Leaders, and Ambassadors. Teacher Fellows and Teacher Leaders work inside the classroom, while the Ambassadors work with policy makers. This reinforces TFP's whole-system approach to quality learning that stresses the importance of engagement within and outside a classroom's four walls.

Both the Teacher Fellow and Teacher Leader programs introduce progressive pedagogy and inquiry-based teacher training methods to increase the quality of teaching. We select, train, and mentor both new teachers (Fellows) and tenured government teachers (Leaders) with years of experience. We work with both cohorts concurrently during the 2-year structured program. Each teacher receives 400–600 h of training and personalized coaching tailored to their own and their community's particular circumstances. While Teacher Fellows may not have the experience of Teacher Leaders, they bring new energy and fresh perspective to the school system.

The Ambassador Program invites Teacher Fellows who have completed the program to work directly with policy makers. This program was developed to give our teachers a pathway to channel their efforts toward system-wide changes. We train our Ambassadors in policy and program management at the Asian Institute of Management, then place these Ambassadors in existing vacancies throughout the local and national government. Through the Ambassador Program, young teachers are encouraged to share their recent experiences on the ground, which in turn help to inform education policy. By doing so, we also hope to narrow the gap that frequently exists between policy development and its successful implementation due to the failure to identify obstacles on the ground.

6.1.2 Living in Poverty Is Living with Chronic Stress

Initially, our teacher training curriculum focused mainly on the cognitive domain of learning. However, we soon recognized that the affective domain was equally significant. In 2013, we explored the primary impact of poverty and chronic socioemotional stress on learning outcomes, as well as its secondary effect on teachers. A growing body of research supports this intersectional view of student development and school health (Stafford-Brizard 2016). Struggling schools often expose the underlying effects of the conditions of recurring generational poverty. Often, this chronic stress or *trauma* does not allow children (or their parents) a sense of well-being and emotional regulation. Trauma adds to the regular stressors in education that can affect competent learning, i.e., how teachers teach and how

students learn. Understanding these circumstances, we instituted trauma management and psychosocial first aid as part of our teacher training curricula. Though more research is required, our internal evaluations indicate that our focus on trauma and the affective domain of learning has enhanced our students' cognitive learning.²

6.2 What Perspectives Do We Offer?

Teach for the Philippines embraces the idea that all our children can and should expect excellent education. We engage in global conversations around enhancing the quality of the education workforce and ensuring its effectiveness. Beyond focusing on learning outcomes, we also anchor our definition of “effectiveness” on the notions of equity and cultural contextualization.

6.2.1 Practitioner Perspective

The global education discourse stands to benefit from hearing *directly* from teachers, principals, and nongovernment organizations in order to develop a complete understanding of theory, policy, data, and their effects on the education of our future generations. Through global engagement, we often discover that other countries may be encountering challenges similar to those we face in the Philippines. This provides a platform on which to discuss and share solutions that are proving effective.

6.2.2 Indigenizing Education

As enriching as the global discourse may be, it must nevertheless be balanced by the contexts we face within the Philippines. It is vital to remain mindful of developing culturally responsive approaches and identifying hyperlocal solutions—to indigenize.³ We recognize the imperative to identify and utilize our histories and cultures to create and drive an excellent and relevant education for future generations. Just as a one-size-fits-all solution does not work within an effective classroom, it should not apply when developing an education workforce that consistently improves learning outcomes. TFP engages in patient and repetitive

²In 2017, TFP ran an early-stage RCT to assess whether our trauma-informed teacher development curricula improved student outcomes. The RCT confirmed that the TFP curricula produce teachers who demonstrate statistically significant increases in numeracy and literacy outcomes in students (Linden et al. 2017). Given the scope of our teachers' involvement in community building, our next research focus is on the impact on learning of psychosocial and participatory community projects.

³“Indigenization” is a popular, postcolonial term in social work. It stems from the idea that the developing world suffered both political *and academic* colonialism.

cycles of action, reflection, and dialogue to find a solution that considers several factors, including the Filipinos' sociocultural biases and the precolonization and postcolonization history of education in the Philippines.

Through complementary skills training, TFP-trained teachers implement required community engagement projects within their 2-year affiliation with TFP. These socially oriented projects give teachers the flexibility and opportunity to integrate current social and cultural challenges within their communities to magnify the impact of their efforts.

6.3 Which Strategies Are Working?

The purpose of education is to prepare human beings who can successfully adapt to a future that is increasingly in flux. This holds especially true in times of massive and unexpected disruption, where the response to adversity is of key significance to future outcomes. Research suggests that teachers have the highest impact on student performance (Oppen 2019); therefore, it would make sense to invest in our teachers.

We have identified five critical strategies to improve education workforce quality and effectiveness, namely, (i) expanding the definition of, while broadening the entry pathways, to the “education workforce”; (ii) increasing school-based coaching for teachers; (iii) reinforcing the importance of education workforce well-being; (iv) promoting participant ownership of data; and (v) involving teachers in discussions on education policy. These strategies apply to what may be described as “normal” situations as well as extraordinary circumstances, such as the current coronavirus disease (COVID-19) pandemic. While there is no denying the magnitude of disruption that COVID-19 has wrought upon society, the pandemic presents an opportunity to reevaluate and possibly redesign our education system for what lies ahead. In response, TFP has finetuned its strategies to address the immediate impact of COVID-19 on learning. We will continue to adjust these strategies to be relevant in a postpandemic world (see section IV below). Our five approaches contribute directly to the building of learning societies by making traditional education systems more inclusive of nontraditional actors. In the context of rapid changes and advancements, TFP's participants are essential to keep education relevant.

6.3.1 *Expand the Definition of “Education Workforce”*

In 2016, the World Bank performed a simple regression analysis throughout the Philippines and found that teachers' subject knowledge performance was *not necessarily associated with their education levels nor their length of experience in the classroom* (World Bank 2016b). And yet, to become a government teacher in the Philippines, one must complete 18 credits at an accredited teacher education institute and pass a professional licensure examination for teachers. Though some

argue that teacher licensure standards elevate a teachers' image and enhance respect for the teaching profession (Riney et al. 2006), around the world, the connection between succeeding in the licensure examinations and effective teaching is unclear (Schuls and Trivitt 2013, Allen 2010). In the Philippines, we should consider whether the traditional pathways into the profession of education are consequential to gaining a more skilled talent pool.

Teach for the Philippines believes that the Philippines needs to dedicate resources to developing alternative paths for nontraditional specialists to enter the field of education. Our Teacher Fellows program encourages young Filipino student leaders with education degrees *and* those who come from disciplines *outside education* to consider teaching in public schools. Through rigorous preservice training, we ensure that our Fellows secure the requisite credits and license to teach. Once classes begin, we assign each of them to an instructional coach for over 400 h of continuous in-service training. The research supports our experience, showing that trained teacher-coaches who pass on pedagogical skills are critical to improving student learning outcomes (Mukeredzi et al. 2015). Further, there is the case of Sierra Leone, where programs providing alternative pathways to qualification for unlicensed teachers and training them *in school* have been shown to improve student learning and aspirations (Crisp, Safford, and Wolfenden 2017). We can increase the quality of talent that we have in our schools by expanding the pathways into the profession of education.

6.3.2 Increase School-Based Coaching

Although school enrollment has increased significantly worldwide in recent decades, learning levels have remained stubbornly low. In the Philippines, poor learning outcomes persist even as teachers' and students' absenteeism levels remain low (World Bank 2016a). The situation is dire: the Philippines placed 79th out of 79 countries in the 2018 Programme for International Student Assessment survey (OECD 2019) and 58th of 58 in the most recent Trends in International Mathematics and Science Study (Mullis et al. 2020),⁴ which shows that *students and teachers are going to school, but students are not learning*. One way to support the development and effectiveness of teachers is to provide them with structured coaching. Through TFP's coaches, TFP helps with individual competency-based student assessments and provides peer feedback, enabling teachers to clearly identify critical areas they need to improve on to meet students at their level.

⁴Even among peers in the region, the Philippines lags behind. Published in December 2020, the 2019 Southeast Asia Primary Learning Metrics (SEA-PLM) showed that only 29% of grade 5 Filipino students are at the level where they are able to "read a range of everyday texts, such as simple narratives and personal opinions, and begin to engage with their meaning" (SEAMEO and UNICEF 2020).

To achieve this, TFP uses the Teaching at the Right Level (TaRL)⁵ methodology, which is based on (i) dividing children based on learning needs rather than age or grade; (ii) dedicating time to foundational skills rather than focusing mainly on the curriculum; and (iii) frequently assessing student performance, rather than relying only on end-of-year examinations (Banerjee et al. 2016). TFP’s coaches help our teachers implement TaRL; however, teachers may access similar coaching strategies in *group settings* through professional learning communities like learning action cells.⁶ There is the perception that recruitment and training of high-quality talent and individualized coaching for teachers are too challenging, too time-intensive, and too expensive for underserved communities. This must change. Education leaders need to reconsider their priorities. Based on our experience, school-based coaching should be one such priority.

6.3.3 Acknowledge the Importance of Teacher Well-Being

The well-being of individuals tasked with improving student learning outcomes is critical, and yet it is often overlooked. A teacher’s stress levels influence those of their students and co-teachers and are thereby relevant to any conversation on a teacher’s impact on learning (Cox, Solomon, and Parris 2018). At TFP, we focus on the educators’ well-being, which forms an essential element in our trauma-based practice. We recognize that teachers cannot deliver learning from an empty emotional well. Likewise, administrators cannot support teachers from an empty well. Moreover, parents or guardians cannot nourish (their children or the school) from empty wells. TFP has a full-time specialist assigned to provide psychosocial support, resilience, and prosocial relationship training to our teachers. We have made additional investments by partnering with a professional network of counselors, psychotherapists, and psychiatrists. A focus on workforce well-being is critical in constructing the necessary socioemotional building blocks for our children.

6.3.4 Challenge the Framework of Evaluations and Promote Participant Ownership of Data

With the ongoing COVID-19 pandemic, we have the opportunity now, as never before, to rethink our framework for program evaluations. Evaluative work can and should answer critical questions about how historical and policy decisions have

⁵TaRL is an evidence-based educational approach that helps children develop basic reading and math skills.

⁶DepEd defines a learning action cell as a group of teachers engaged in collaborative learning sessions to solve challenges encountered in school, facilitated by the school head or moderator (Department of Education 2016).

affected populations, the effect of program strategy on underlying system drivers, and how entangled hyperlocal cultural contexts are in the structural conditions of our work (Center for Evaluation Innovation et al. 2017). *Let us build a data-driven post-COVID-19 future on equitable evaluation*. Aligning evaluation practices with an equity approach is critical if we hope to build back better our education systems. Evaluation teams must move beyond cultural diversity to diversity in disciplines, beliefs, and lived experiences. They must seek the cultural appropriateness and validity of their evaluation methods. The evaluation design must be capable of revealing system-level drivers of inequity in the present and historical context.

The degree to which communities have the power to shape and own how evaluations are conducted is crucial (Center for Evaluation Innovation et al. 2017). TFP is committed to multicultural validity and participant ownership.⁷ We place equal value on stories (qualitative research) as we do on quantitative analysis. Qualitative research should be legitimized because its historical and cultural value adds critical context to the evaluation.

6.3.5 Involve Teachers in Discussions on Education Policy

The findings from our Ambassadors Program suggest that innovative disruptions to the current talent pipelines into government agencies are worth exploring. Policy makers benefit from incorporating insights from teachers and other school staff who have fresh experience on the ground. The TFP Ambassadors Program provides opportunities for former Teacher Fellows to work in government agencies as technical assistants. This, in turn, allows TFP Ambassadors to bridge the gap between policy design and the existing challenges to implementation on-the-ground. *Nihil de nobis, sine nobis*. Nothing about us, without us.

Our TFP Ambassadors like Angela Rosal have assisted in drafting significant bills with the potential to impact the education of 110 million Filipinos. Drawing on her experience as a Teacher Fellow, Rosal, while working in the office of former Senator Bam Aquino, drafted the *Masustansyang Pagkain Para sa Batang Pilipino Act*, which requests and appropriates funds for a national feeding program targeted at malnourished children in all public daycares, kindergartens, and elementary schools. On 20 March 2018, the Act was passed into law (Republic Act No. 11037).

Our Ambassadors have also assisted in realigning national budget items in support of under-resourced rural communities. Over 6 years, five successive Ambassadors worked in Del Carmen, Siargao, a fifth-class municipality in Eastern Mindanao. In 2018, their combined efforts resulted in the fishing community being awarded 137

⁷Multicultural validity is the cultural accuracy of one's understanding and judgments, and their consequences across communities. Orienting TFP's evaluations to program stakeholders' needs rather than that of funding agencies requires that we include stakeholders in building a consensus on the results and consequent plans to improve.

million pesos (₱)⁸ (\$2.8M) from the national budget—the highest funded project for a local government unit in the Philippines. The municipal mayor of Del Carmen at the time, Alfredo Coro, said, “Our focus on education reforms has been acknowledged in the provincial, regional, and national levels since 2014, when we started seeing the outcomes of our initiatives and sustained the results over time.”⁹

Since its inception, close to 70% of our Teacher Fellows have applied to the Ambassadors Program, of which 33% have pursued full-time employment in public service.¹⁰ Their work has been regional and national, including the Cagayan de Oro City Education Road Map 2030 in Mindanao; the nationwide management and development of DepEd self-learning modules; professional development and career progression planning for teachers in the DepEd Central Office; and preparations for the national Programme for International Student Assessment Results (PISA) 2021 Field Trials. Offering teachers a seat at the decision-making table contributes relevant insights to the discussion and assists in the appropriate distribution of resources.

6.4 A Note on Coronavirus Disease Response

In the wake of the disruption to education due to COVID-19, most parts of the world have shifted to online learning, while some countries have adopted a hybrid of online and in-person instruction. However, a presidential order (Department of Education 2020) prohibits face-to-face instruction throughout the Philippines until a COVID-19 vaccine is available, and a certain level of herd immunity has been achieved. This has prompted DepEd to establish a two-option strategy to encourage learning continuity. Students who have access to the internet and information and communication technology (ICT) devices will receive instruction on digital platforms. Meanwhile, registered students who indicated that they do not have access to the internet or ICT devices will receive printed modules and distanced instruction through radio and television. There is an alarming disparity in the Philippines between those with access to the internet and those who do not. Only 55% of Filipinos have access to the internet, while only 26% of public schools have internet access (Jones 2019). At TFP, we are retraining our teachers for distance instruction. We also understand that it is essential to offer support for learning continuity at this time, and we have deployed our teachers to the communities to serve. Their proximity to the students and parents who may need support is critical. In May 2020, we successfully conducted

⁸\$1 = ₱48.09 as of 6 January 2021. These are in support of two local government programs: a multispecies hatchery project of the Bureau of Fisheries and Aquatic Resources (a ₱40 million project or \$830,000); and the Siargao Climate Field School for Farmers and Fisherfolks (₱97 million project or \$2M).

⁹Personal communication.

¹⁰As of September 2020, Teacher Fellows continue full-time across the following offices: DepEd Central Office, DepEd, Biñan City; Commission on Higher Education; local governments of Cagayan de Oro, Lucena, Marikina, and Navotas; League of Cities of the Philippines; National Youth Commission; and Office of the Vice President.

our first All-Virtual and Summer Institute Teacher Training for first- and second-year teachers.

The responses of TFP to the limitations created by COVID-19 encompass the following:

(i) **Acute Response**

- Improving and ensuring connectivity across teams, which includes maximizing online productivity through tools such as Zoom Pro accounts
- Providing aid for graduating Teachers and Alumni Ambassadors stranded in their placement sites
- Implementing COVID-19 mitigating measures, including testing, purchase of personal protective equipment for all employees, private health maintenance organization coverage for deployed field personnel

(ii) **Strategic Response**

- Identifying problems correctly through rapid assessment community surveys
- Pivoting modes of delivery through the migration of all teacher training modules and delivery to virtual or remote delivery, focusing on synchronous and asynchronous modes, online and offline channels
- Commitment to measurement and replicating only what works
- Exploring access challenges

6.5 Conclusions

It is a sad reality that despite teachers' best efforts, students worldwide do not have equal access to quality education. Today, we face aggravating circumstances—an unprecedented health crisis that has taken a toll on past efforts and threatens to generate insurmountable inequities. The students who were already disadvantaged before COVID-19 are now even more crucially and cruelly impacted. Without immediate and long-lasting action, the most underserved children will continually fall further behind, compounded by other preexisting challenges such as poverty, gender, disability, geography, and ethnicity.

The COVID-19 crisis, nevertheless, comes with opportunities. It opens the door for us to challenge and reframe education systems to become more inclusive and equitable; it also underlines the increasing need to redefine future learning societies beyond the classroom structure and incorporate hybrid methods of education engagement. Equity in education in the Philippines is possible by broadening the pathways into the teaching profession, increasing school-based coaching, prioritizing the well-being of our education workforce, promoting participant data ownership, and ultimately, by allowing teachers to participate in policy decision-making processes.

Education reform is the result of the work of all stakeholders, and TFP is committed to being part of this shared effort.

References

- Allen, M. 2010. *Teacher quality and teacher licensure: improving state need assessments of secondary science and mathematics teachers: Challenges, possibilities, and recommendations*. Statesboro: Georgia Southern University. <https://www.aplu.org/projects-and-initiatives/stem-education/science-and-mathematics-teaching-imperative/smti-projects/improving-state-need-assessment/teacher-quality-teacher-licensure.html>. Accessed 24 September 2020.
- Banerjee, A., et al. 2016. Mainstreaming an effective intervention: evidence from randomized evaluations of “teaching at the right level” in India. *National Bureau of Economic Research Working Paper*. No. 22746. <https://www.nber.org/papers/w22746>. Accessed 21 September 2020.
- Center for Evaluation Innovation et al. 2017. Equitable evaluation framing paper. <https://drive.google.com/file/d/1RBWoVWduMvh4S68qdmPLN3WPEyPWQwOS/view>. Accessed 24 July 2020.
- Cox, A., Solomon, B., and Parris, D. 2018. Teacher well-being is a critical and often overlooked part of school health. <https://www.childtrends.org/blog/teacher-well-being-is-a-critical-and-often-overlooked-part-of-school-health#:~:text=Teacher%20wellness%20has%20been%20linked,of%20students%20and%20other%20teachers>. Accessed 29 August 2020.
- Crisp, M., Safford, K., and Wolfenden, F. 2017. It takes a village to raise a teacher: The Learning Assistant Programme in Sierra Leone. The Open University and Plan International. <http://oro.open.ac.uk/49603/>. Accessed 31 July 2020.
- Delgado, C.I.L. 2018. A historical analysis of the Philippine public education system (1901–2017) and investigation of external investments in access and quality. Dissertation. Manila: Ateneo de Manila University.
- Government of the Republic of the Philippines, Department of Education. 2016. The learning action cell as a K to 12 basic education program school-based continuing professional development strategy for the improvement of teaching and learning. DepEd Order No. 35, s. 2016. <https://www.deped.gov.ph/2016/06/07/do-35-s-2016-the-learning-action-cell-as-a-k-to-12-basic-education-program-school-based-continuing-professional-development-strategy-for-the-improvement-of-teaching-and-learning/>. Accessed 16 November 2020.
- Government of the Republic of the Philippines, Department of Education. 2020. Official statement on the President’s directive to postpone classes until a vaccine is found. <https://www.deped.gov.ph/2020/06/08/official-statement-4/>. Accessed 6 January 2020.
- Jones, N. 2019. *Small policy change, big impact: Improving internet access in the Philippines*. Manila: The Asia Foundation. <https://asiafoundation.org/wp-content/uploads/2019/03/CfC-Ref-orm-Story-11-Improving-Internet-Access-in-the-Philippines.pdf>. Accessed 29 August 2020.
- Linden, L., Abeberese, B., and Kumler, T. 2013. *Improving reading skills by encouraging children to read in school: A randomized evaluation of the Sa Aklat Sisikat Reading Program in the Philippines*. Massachusetts: National Bureau of Economic Research. <https://www.povertyactionlab.org/sites/default/files/research-paper/222%20SAS%20Reading%20July%202013.pdf>. Accessed 31 July 2020.
- Linden, L., Beam, E., and Thomas, M. 2017. *Teach for the Philippines pilot evaluation report—Numancia Central Elementary School*. Manila.
- Mukeredzi, T.G., N. Mthiyane, and C. Bertram. 2015. Becoming professionally qualified: The school-based mentoring experiences of part-time PGCE students. *South African Journal of Education* 35 (2): 1–9.
- Mullis, I.V.S., et al. 2020. *TIMSS 2019 International Results in Mathematics and Science*. International Association for the Evaluation of Educational Achievement

- (IEA). <https://www.iea.nl/sites/default/files/2020-12/TIMSS%202019-International-Results-in-Mathematics-and-Science.pdf>.
- Opper, I. M. 2019. Teachers matter: understanding teachers' impact on student achievement. https://www.rand.org/pubs/research_reports/RR4312.html. Accessed 28 August 2020.
- Organisation for Economic Co-operation and Development (OECD). 2019. The Programme for International Student Assessment Results (PISA) 2018 results. Paris: OECD Publishing. https://www.oecd.org/pisa/publications/PISA2018_CN_PHL.pdf. Accessed 31 July 2020.
- Riney, M.R., et al. 2006. National implications: teacher education students' perceptions of state licensure requirements and pedagogical training. *National Forum of Teacher Education Journal* 16 (3): 1–7.
- Schuls, J., and Trivitt, J. 2013. Teacher effectiveness: An analysis of licensure screens. https://www.researchgate.net/publication/277902181_Teacher_Effectiveness_An_Analysis_of_Licensure_Screens. Accessed 24 September 2020.
- Southeast Asian Ministers of Education Organization (SEAMEO) and the United Nations Children's Fund (UNICEF). 2020. *Southeast Asia primary learning metrics (SEA-PLM) 2019 main regional report*. UNICEF. <https://www.seaplms.org/PUBLICATIONS/regional%20results/SEA-PLM%202019%20Main%20Regional%20Report.pdf>.
- Stafford-Brizard, K. B. 2016. *Building blocks for learning: A framework for comprehensive student development*. <https://ams3.digitaloceanspaces.com/turnaround/wp-content/uploads/2016/03/14034511/Turnaround-for-Children-Building-Blocks-for-Learningx-2.pdf>. Accessed 24 July 2020.
- World Bank. 2016a. *Assessing systems for hiring and deploying teachers in the Philippines*. Washington, DC. <http://documents1.worldbank.org/curated/en/519221468948112271/pdf/106960-REVISED-16-PGS-PH-PETS-QSDS-Note-2.pdf>. Accessed 31 July 2020.
- World Bank. 2016b. *Developing a proficient and motivated teacher workforce in the Philippines*. Washington, DC. <http://documents1.worldbank.org/curated/en/351711468567066113/pdf/106950-REVISED-PH-PETS-QSDS-Note-3.pdf>. Accessed 14 August 2020.

The opinions expressed in this chapter are those of the author(s) and do not necessarily reflect the views of the Asian Development Bank, its Board of Directors, or the countries they represent.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 3.0 IGO license (<http://creativecommons.org/licenses/by-nc/3.0/igo/>) which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the Asian Development Bank, provide a link to the Creative Commons license and indicate if changes were made.

Any dispute related to the use of the works of the Asian Development Bank that cannot be settled amicably shall be submitted to arbitration pursuant to the UNCITRAL rules. The use of the Asian Development Bank's name for any purpose other than for attribution, and the use of the Asian Development Bank's logo, shall be subject to a separate written license agreement between the Asian Development Bank and the user and is not authorized as part of this CC-IGO license. Note that the link provided above includes additional terms and conditions of the license.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

