

Early Childhood Education

Harness the potential of early childhood education for long-term benefits on children's learning

Philippines SEA-PLM 2019

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| Context

Early childhood education (ECE)¹ offers a vital foundation for lifelong learning by nurturing children's foundational and transferable skills that prepare them to participate in primary education and beyond, while reducing the risk of school failure. As such, investment in ECE has long-term positive impacts on children's education.

The Philippines supports one year of kindergarten as compulsory education for all 5-year-old children as initiated in the Kindergarten Education Act of 2012. Moreover, the Early Years Act of 2013 mandated the Early Childhood Care and Development (ECCD) Council to coordinate the various ECCD programs offered by the Department of Education (DepEd), the Department of Social Welfare and Development (DSWD), the Department of Health (DOH), and the National Nutrition Council (NNC), as well as monitor the delivery of services by the local government units (LGU) to beneficiaries nationwide. These include the provision of pre-school education for 3- to 5-year-old children.

Despite the policies that support ECE, participation in ECE is still limited in the country. About 66% of 5-year-old children were enrolled in kindergarten and 47% of 3- to 4-year-old children were in pre-school² in School Year 2020–2021. In this sense, it is imperative to ensure all Filipino children have access to quality ECE.

1. In the Philippines, ECE for 3–4-year-old children is commonly called “pre-schools”, which is a devolved service to local government units. ECE for 5-year-old children is “kindergarten” and it is the mandate of the Department of Education (DepEd). Despite this difference, ECE is defined as nursery school, kindergarten, or pre-school between birth and 5 years of age in the Philippines SEA-PLM 2019.

2. Data on kindergarten are from DepEd (2021 Key Education Statistics) and data on pre-school are from the Department of Social Welfare and Development (DSWD)'s administrative data on the Supplementary Feeding Program.

Analysis and Key Findings

Grade 5 students with ECE experience have relatively higher test scores, are better prepared for primary school, enter primary education at the right starting age, and are less likely to repeat grades

According to the *SEA-PLM 2019 National Report of the Philippines*,³ Grade 5 students who attended an ECE program perform better in reading, writing, and mathematics tests. However, the benefits of ECE attendance are also evident in children’s school readiness, entry at the right primary school starting age, and grade progression.

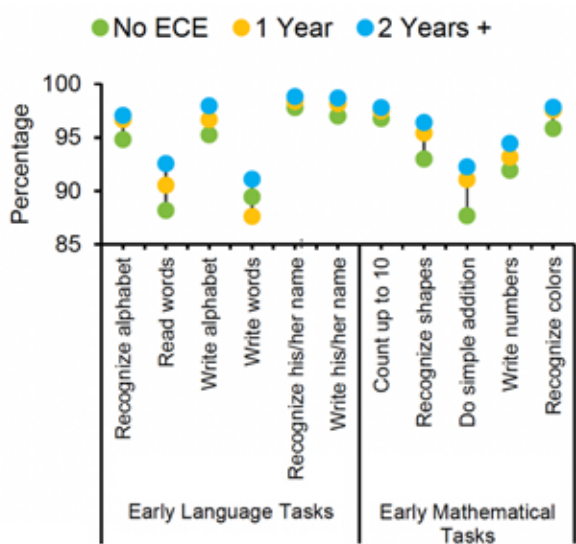
In SEA-PLM 2019, parents were asked which language and mathematical tasks their children could perform before attending primary school. Parents whose children received ECE reported that their children were able to perform slightly more language and mathematical tasks prior to primary education, compared to parents whose children did not attend an ECE program (**Figure 1**).

Starting education at the right age is a head start in learning and predicts higher success in school. Data suggest that children who received ECE are more likely to attend primary education at age 6, which is the official primary school starting age in the Philippines, compared to those who did not attend ECE. More specifically, 46% of children who attended a two-year ECE program and 40% of those with one year of ECE experience entered primary education at age 6, compared to 14% of peers with no ECE attendance (**Figure 2**). It is also noteworthy that students who entered primary education at a later age perform significantly worse in reading, writing, and mathematics than peers who joined at the right age (**Figure 3**).

Grade repetition may lead to system inefficiency and inadequate use of the education budget.⁴ Children who received ECE are less likely to repeat grades than those who did not attend an ECE program. A relatively higher share of children with no ECE attendance (44%) have repeated grades, compared to those with one year of ECE experience (30%) and two years of ECE experience (31%) (**Figure 4**).

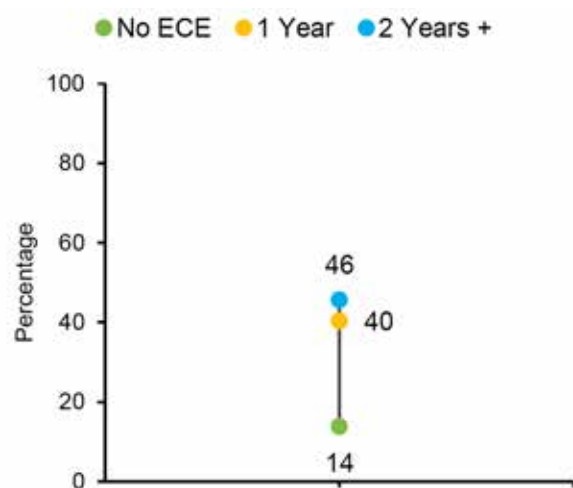
These findings suggest that while there are no large differences between years of ECE attendance and the school success factors, students who did not attend an ECE program at all are at a disadvantage in terms of school readiness, entry at the right primary school starting age, and grade progression.

Figure 1: Percentage of Grade 5 students by ability to perform early language and mathematical tasks prior to primary education by ECE attendance



Source: Philippines SEA-PLM 2019

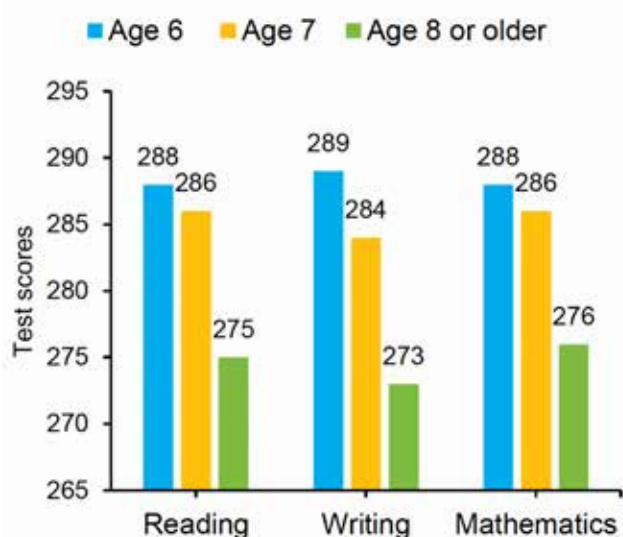
Figure 2: Percentage of Grade 5 students who entered primary education at age 6 by ECE attendance



Source: Philippines SEA-PLM 2019

3. UNICEF & DepEd. (2021). *SEA-PLM 2019 National Report of the Philippines*. Manila, The Philippines: United Nations Children’s Fund (UNICEF) & Department of Education (DepEd).
 4. UNICEF. (2019). *A World Ready to Learn: Prioritizing Quality Early Childhood Education*. UNICEF, New York.

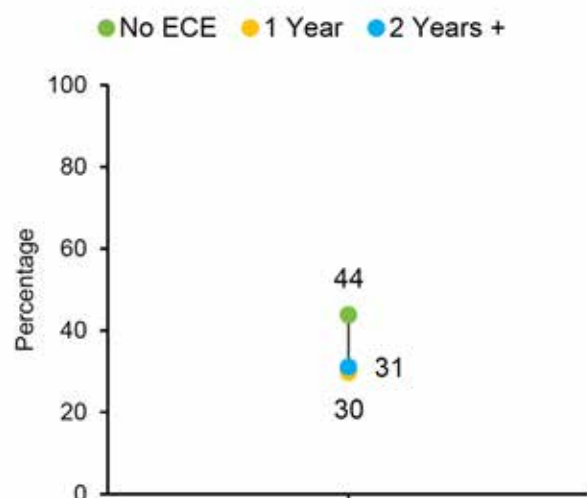
Figure 3: Test scores in reading, writing and mathematics by children's age of primary school entrance



Note: Age 6 is the official entrance age for primary education

Source: Philippines SEA-PLM 2019

Figure 4: Percentage of Grade 5 students who repeated grades by ECE attendance



Source: Philippines SEA-PLM 2019

Disparity in access to ECE programs is prominent, putting students from families of low-socio-economic status (SES)⁵ and public schools at a disadvantage

Despite the benefits of ECE experience, gender, SES, geographical location, and school type factors set apart students' ECE participation. In particular, data suggest that although location and gender disparities in ECE attendance are relatively small, there are more marked gaps by SES and school type (**Figure 5**).

The disparity in ECE attendance by urban-rural divisions⁶ is not so apparent. Eighty-six percent of students from urban areas received ECE for one year or more, compared to 85% of those from rural areas. However, children from urban areas have a slightly greater advantage in attending ECE programs for more than two years. Fifty percent of students who live in urban areas participated in a two-year ECE program, compared to 42% of those in rural areas.

Similarly, there is a small gender disparity in ECE participation, although girls have a slightly greater advantage than boys. Specifically, 88% of girls received at least a one-year ECE program, compared to 83% of boys. Almost an equal share of girls (44%) and boys (43%) attend an ECE program for two years or more.

However, the disparity in ECE attendance by SES is more prominent. Ninety-three percent of students from the highest-SES families attended at least a one-year ECE program, while the figure is 83% for students from the lowest-SES households. Furthermore, 54% of students from the highest-SES families participated in an ECE program for two years or more, compared to 39% of the lowest-SES students. This is consistent with global evidence that access to ECE has a strong association with household factors.⁷

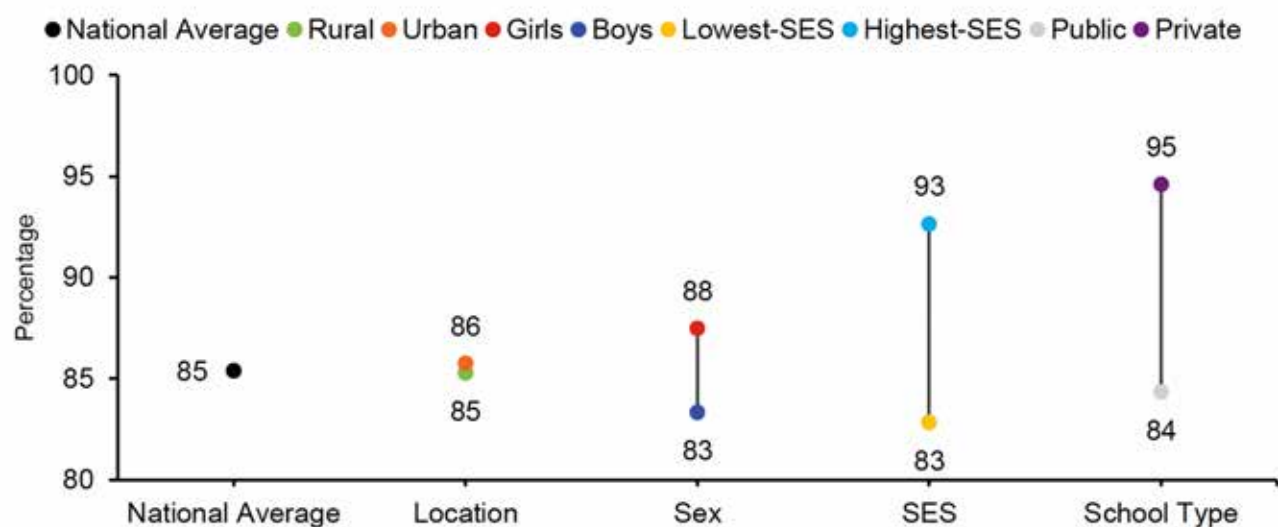
Likewise, in terms of school types, 95% of students from private schools participated in at least a one-year ECE program, compared to 84% of students from public schools. More than 62% of students from private schools received two years or more of ECE, compared to 41% of students from public schools.

5. The SES Index was computed per child in SEA-PLM 2019. It is the composite of parental education, parental occupation, and home possessions. The higher value of the index means more resources available for the family.

6. Large city and city are categorized as urban; and village, small town, and town are grouped as rural.

7. UNICEF. (2019). *A World Ready to Learn: Prioritizing Quality Early Childhood Education*. UNICEF, New York.

Figure 5: Share of Grade 5 students with at least 1 year of ECE experience by gender, SES, geographic location, and school type



Source: Philippines SEA-PLM 2019

Investment in ECE may enhance children’s learning outcomes in general, while reducing the probability of late entry to primary education and grade repetition among lower-SES children

Global evidence shows that the benefits of investment in ECE are more prominent for children from disadvantaged backgrounds.⁸ The same results are found in the Philippines, that a relationship between ECE attendance and Grade 1 entrance as well as subsequent grade progression are salient for lower-SES children.

In terms of entrance to primary education, with all else being equal, on average, the likelihood of avoiding late entry to primary education is positively associated with ECE attendance only for the lowest-SES children ($p < 0.05$). More specifically, among children from the lowest-SES households, those who attended an ECE program for at least one year are 66% more likely not to delay the entry to primary education beyond age 6, compared to those who have no ECE experience.

In SEA-PLM 2019, almost 30% of Grade 5 students reported to have repeated grades in primary education and repeaters perform significantly worse than non-repeaters in reading, writing, and mathematics. Similarly, when the low-SES students attended at least a one-year ECE program, the probability of not repeating grades is 84% higher than those children with no ECE experience from the same SES group ($p < 0.01$).

Furthermore, although analysis by SES is not available due to the small sample size, when children receive at least one year of ECE, they are almost seven times more likely to attain Band 6⁹ in reading in general, which demonstrates a proficiency level equivalent at the end of primary education ($p < 0.01$), and four times more likely to attain Band 6 in mathematics ($p < 0.01$), compared to peers who did not receive ECE.

These results suggest that investing in ECE is highly associated with children’s learning outcomes in later years, while it may play as an equalizer to mitigate a gap between advantaged and disadvantaged children in access and participation as the benefits are salient among low-SES children. This implies that ECE will make an education system more efficient by reducing the overall system and individual costs wasted by low entrance and grade repetition of low-SES children.

8. UNICEF (2019). *A World Ready to Learn: Prioritizing Quality Early Childhood Education*. UNICEF, New York; Heckman, J. J. (2011). The Economics of Inequality: The Value of Early Childhood Education. *American Educator* (35), 31-47. Retrieved from <https://files.eric.ed.gov/fulltext/EJ920516.pdf>

9. SEA-PLM 2019 uses proficiency bands to measure student’ mastery level in reading and mathematics. Children who are in Band 6 or above are likely to have mastered the fundamental reading and mathematical skills expected by the end of primary school. For the assessments of likelihood of achieving proficiency Band 6 in reading and mathematics, we used a multinomial logistic regression using all five plausible values and student weights. The likelihood is computed by averaging the log likelihood of the beta coefficient across the five basic models.

| Recommendations

In the Philippines, ECE has a great potential in ensuring children's participation and learning in later years as well as in reducing the achievement gaps by helping the most vulnerable children keep up with their peers. On the other hand, children who are most in need, especially those who are from low-SES families, had the least access to ECE programs. Furthermore, the data reveal that Grade 5 students who did not have an ECE experience are worse off in school success factors including test scores, school readiness, entry at the right primary school starting age, and grade progression.

Based on this analysis, the following recommendations may enhance access to quality ECE for all Filipino children.



Improve access to universal kindergarten education by ensuring quality services and support for poor and vulnerable children

Although one year of kindergarten is compulsory in the Philippines, less than 70% of 5-year-old children were enrolled in kindergarten in 2020. This may have been exacerbated in the face of the COVID-19 pandemic. In this sense, it is critical to increase participation in kindergarten so that all children are physically, socio-emotionally, and intellectually prepared for primary education. To achieve this, while the analysis shows that children from low-SES families and public schools are at relative disadvantage in accessing ECE, it is encouraged to further strengthen data collection at the school level to identify the profile of children who are not attending kindergarten and the barriers they are facing in accessing the services. At the same time, as the disparity in ECE attendance by SES is prominent, household factors may play a strong role in children's access to ECE. In this sense, parents from low-SES families should be capacitated in their responsibilities to send their children to ECE. Furthermore, in areas where it is difficult to reach public schools, partnerships with non-governmental service providers may play a crucial role in ensuring access to kindergarten. In addition, alternative kindergarten models and catch-up programs may supplement the access in this regard. At the same time, in order to prevent early drop out in ECE, mother-tongue education can be strengthened via resource development and teacher training. For kindergarten completers who did not meet the minimum requirements for entering Grade 1, a bridging program can be provided to help them catch up on the core competencies of basic reading, writing, and arithmetic, which are the fundamental skills that kindergarten students must master to become productive and effective individuals in the future.



Prepare pre-schools to further expand its service in the long run

The data suggest that although there are no large differences between years of ECE attendance, children who attended an ECE program for two years or more are slightly at an advantage in terms of school readiness, entry at the right primary school starting age, and grade progression. This implies that the expansion of pre-school education may be needed in the long run. Currently, children from urban areas and high-SES families enjoy ECE experience beyond one year of compulsory education. In this sense, more efforts should be put in providing pre-school education for rural and low-SES children by identifying specific bottlenecks in the expansion of pre-school education for this population. At the same time, it is crucial to identify areas without child development or day care centers and prioritize them in resource allocation. Additionally, pre-service training for pre-school teachers can be strengthened, providing specialization on pedagogy in ECE, to enrich the teacher workforce. While partnership with the private sector is possible to strengthen efforts for scaling up organized pre-school education, a strong coordination mechanism should be put in place so that pre-school programs can be operated with a standardized strategy at the national level.



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Increase domestic and international funding to ensure access to quality early childhood education for all children

Increasing the provision of quality ECE programs requires large investments, including funding for infrastructure and capacity building for teachers as well as support for parents and caregivers. To maximize the long-term benefits of ECE, UNICEF advocates for financing education in the early years of a child's life and reaching out to the most disadvantaged populations, where socio-economic returns are often the highest. In this sense, it is encouraged to allocate at least 10% of domestic education budgets to early childhood education.¹⁰ Furthermore, as the findings suggest that children from low-SES families are at the most disadvantage in accessing ECE programs, it is encouraged to review the existing laws and policies that may fall short of being equitable in resource allocation.



Invest in more data collection and research to improve the scope and quality of ECE programs

While a vast body of research on ECE is available at the global level, there are still substantial gaps in the collection of nationally representative data, evidence, and research on children's early years in the Philippines. The SEA-PLM study collects data on ECE only in terms of attendance. More data and research are needed about quality, transition, and progression in the early grades. Furthermore, research on teacher quality in ECE programs, learning processes and mindsets, and the formation of socio-emotional skills are all critical for improving the quality of ECE, particularly among low-SES children. As a contribution to evidence generation on ECE, UNICEF Philippines, together with DepEd, the ECCD Council, and Australia's Department of Foreign Affairs (DFAT), investigated the growth of social, emotional, cognitive, and language skills in the mother tongue, English, and Filipino on a cohort of learners from the start of kindergarten to Grade 4.¹¹



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10. UNICEF. (2019). *A World Ready to Learn: Prioritizing Quality Early Childhood Education*. UNICEF, New York.

11. UNICEF, Australian Council for Educational Research (ACER), and SEAMEO-INNOTECH. (2022). *Philippines Early Childhood Education Kindergarten to Grade 4 Longitudinal Research*. Manila: UNICEF Philippines. Retrieved from <https://www.unicef.org/philippines/media/3586/file/UNIPH-2022-longitudinalresearch.pdf>

SEA-PLM 2019 Datasets:

To access and download SEA-PLM 2019 datasets, codebooks, background questionnaires, and a data user manual, please submit a registration form via the link below:

<https://link.seameo.org/SEAPLMDatasets>

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