When Schooling Does Not Translate to Learning: Localizing the World Bank's Learning Poverty Framework for SDG 4

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Abstract

Despite improved school participation in the Philippines, many children and youth remained unable to acquire foundational reading skills, reflecting a persistent schooling without learning problem and underscoring the need for community-level evidence on learning poverty beyond national averages, particularly in rural and marginalized contexts. Addressing this gap, the study estimated learning poverty in a selected community in Lanao del Norte by integrating schooling deprivation and learning deprivation using the World Bank Learning Poverty Framework. A quantitative descriptive correlational design was employed involving 119 school-age learners aged 4 to 24 years, spanning preschool to senior high school and including enrolled, unenrolled, and over-aged learners reflecting age grade mismatch. Schooling deprivation data were generated through household survey-based enrollment mapping and triangulated with local school and Alternative Learning System records, while learning deprivation data were obtained through the administration of the DIBELS 8th Edition, a standardized assessment of early reading and foundational skills, with learners classified according to benchmark performance and risk status. Schooling deprivation was computed as the proportion of out-of-school learners, learning deprivation as the proportion of enrolled learners below minimum reading benchmarks, and learning poverty using the World Bank formula: $LP = SD + (1 - SD) \times LD$. Findings revealed severe learning deprivation among enrolled learners and an extremely high learning poverty rate, indicating that schooling participation did not translate into meaningful reading outcomes. The results highlighted the urgency of strengthening early reading instruction and demonstrated the value of community-based learning poverty measurement for guiding responsive education interventions aligned with Sustainable Development Goal 4.

Keywords: *Learning Poverty, Schooling Deprivation, Learning Deprivation, DIBELS 8, Lanao del Norte*

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Introduction

Learning poverty has emerged as a critical barrier to achieving Sustainable Development Goal 4 (SDG 4), which seeks to ensure inclusive and equitable quality education and lifelong learning opportunities for all. Although access to schooling has expanded globally, evidence increasingly shows that school participation does not automatically lead to meaningful learning. Many children attend school but fail to acquire foundational literacy skills essential for academic success and future learning (World Bank, 2019; UNICEF, UNESCO, & World Bank, 2022). This gap between schooling and learning is particularly pronounced in low- and middle-income contexts where instructional quality and learning support remain uneven.

To capture this gap, the World Bank and the UNESCO Institute for Statistics introduced the concept of learning poverty, which focuses on learning outcomes rather than enrollment alone. Learning poverty refers to the share of children who cannot read and understand a simple text by age 10, including those who are out of school and therefore excluded from learning opportunities (World Bank, 2021a). It integrates two indicators: schooling deprivation, defined as the proportion of children not enrolled and assumed not to reach minimum proficiency, and learning deprivation, defined as the proportion of enrolled children who fail to meet minimum reading proficiency by the end of primary education (World Bank, 2021b). Together, these indicators provide a more comprehensive measure of educational exclusion.

The urgency of learning poverty measurement intensified during and after the COVID-19 pandemic, as prolonged school closures and disruptions resulted in substantial learning losses, particularly among disadvantaged learners with limited access to learning support at home (World Bank, UNESCO, & UNICEF, 2021; UNICEF, 2021). While learning loss reflects temporary disruption or slowed progress, learning poverty represents a deeper and more structural condition in which children remain far below minimum proficiency even when schooling resumes (World Bank, 2019).

In the Philippines, the gap between schooling and learning is especially severe and reflects a persistent learning poverty crisis rather than a temporary setback. The World Bank's most recent Learning Poverty Brief estimates that about 5 percent of primary school–aged Filipino children are out of school, while approximately 90 to 91 percent of enrolled learners fail to meet minimum reading proficiency (World Bank, 2024). These estimates align with international assessments such as PISA, which consistently show Filipino learners performing at very low levels in reading and other foundational domains (OECD, 2019, 2023). Reinforcing this evidence, the Second Congressional Commission on Education (EDCOM II) reports very low proficiency rates based on DepEd assessment data, with only a minority of learners meeting expected competencies in the early grades and proficiency declining sharply in later grades, indicating that foundational learning gaps persist and compound over time (EDCOM II, 2026).

Despite the policy relevance of these indicators, learning poverty evidence in the Philippines remains largely macro-level and model-based, relying heavily on national datasets and international assessments. Such approaches risk obscuring local realities, including household constraints, language environments, school resourcing, instructional

practices, and learner-level reading difficulties. Without localized and context-sensitive evidence, it is difficult to design responsive literacy interventions, target the most vulnerable learners, and address the specific drivers of learning deprivation in marginalized communities (UNICEF, UNESCO, & World Bank, 2022).

In response, this study localized the World Bank Learning Poverty Framework within a Philippine community context by examining both schooling deprivation and learning deprivation. Schooling deprivation was analyzed through enrollment patterns, while learning deprivation was assessed using reading proficiency outcomes from the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), a standardized system designed to screen and monitor foundational reading skills and identify learners at risk of reading difficulty for targeted instructional support (University of Oregon, 2020). The study was grounded in the premise that learning poverty is fundamentally rooted in a reading crisis: when children fail to acquire early reading skills, learning gaps accumulate, weaken comprehension, restrict access to academic content, and increase the risk of disengagement and educational exclusion (World Bank, 2019; UNICEF, UNESCO, & World Bank, 2022). The Philippine case illustrates a persistent mismatch between improved school access and weak learning outcomes, indicating that enrollment gains alone are insufficient to achieve SDG 4 targets related to learning quality and equity (World Bank, 2024). By generating localized and empirically grounded evidence, this study contributed to national and global discussions on learning poverty and offered actionable insights for literacy instruction, policy development, and community-based interventions in low-resource settings.

The overarching objective of this study was to establish a community-based estimates of learning poverty by operationalizing and applying the World Bank's learning poverty framework, specifically the indicators and formula for schooling deprivation and learning deprivation, within a Philippine context. It also aimed to (1) determine the level of schooling deprivation in the selected community based on enrollment and non-enrollment data of school-age learners; (2) quantify the level of learning deprivation in the community through the Dynamic Indicators of Basic Early Literacy Skills (DIBELS 8); (3) calculate the overall learning poverty rate by integrating schooling deprivation and learning deprivation in accordance with the World Bank learning poverty formula; and (4) generate localized empirical evidence for actionable results to support SDG 4.

Related Literature

International and regional research consistently shows that schooling participation does not guarantee learning, particularly in foundational literacy. Large-scale assessments such as the Program for International Student Assessment (PISA) reveal persistent reading challenges. In the 2022 cycle, the Philippines performed substantially below international benchmarks in reading literacy, indicating that many 15-year-old learners struggled to interpret, reflect on, and use written information for learning despite being enrolled in school (OECD, 2023). Earlier PISA results from 2018 likewise placed the Philippines among the lowest-performing participating systems in reading (PISA 2018 National Report, 2019). These patterns align with learning poverty estimates, which emphasize that enrollment alone does not ensure foundational reading acquisition (World Bank, 2019; UNICEF, UNESCO, & World Bank, 2022). Complementing international evidence, the Second Congressional Commission on Education (EDCOM II) reported persistently low proficiency even in the early grades, with sharp declines across later grade levels, indicating that learning gaps

compound over time (EDCOM II, 2024, 2025, 2026).

Regional assessments reinforce these concerns. Results from the Southeast Asia Primary Learning Metrics (SEA-PLM) show that many Grade 5 learners in Southeast Asia, including the Philippines, failed to meet minimum reading proficiency benchmarks, suggesting that early comprehension gaps persist into the intermediate grades (SEA-PLM, 2024).

Early-grade evidence further documents foundational literacy weaknesses. The Early Grade Reading Assessment (EGRA) reported that many Filipino learners in Grades 1 to 3 experienced difficulties in decoding, fluency, and comprehension (USAID RTI, 2019). Local Philippine studies using school-based diagnostics such as the Philippine Informal Reading Inventory (PHIL-IRI) similarly found large proportions of learners at frustration and instructional levels, indicating persistent comprehension difficulties across elementary and secondary levels (Pao, 2024; Caabay, 2024; Tolibas, 2025). Other local studies showed that reading challenges often persisted beyond the primary years, reflecting cumulative learning gaps that constrained academic performance and progression (Castillo, 2025; Lagdaan & Sevilla, 2025).

Beyond school assessments, national survey data highlighted literacy-related vulnerability. The Philippine Statistics Authority's Functional Literacy, Education and Mass Media Survey (FLEMMS) emphasized that functional literacy extends beyond basic decoding to include comprehension and the practical use of literacy and numeracy skills, and remained uneven across subpopulations (Philippine Statistics Authority, 2024).

The Science of Reading provides a theoretical lens for interpreting these patterns by emphasizing that reading comprehension depends on the interaction between word recognition and language comprehension, and that early weaknesses in decoding and fluency constrain later comprehension development (Chall, 1983; Gough & Tunmer, 1986; Scarborough, 2001; Stanovich, 1986). Consistent with this framework, the World Bank Learning Poverty Brief identified learning deprivation among enrolled learners as the Philippines' core challenge, resulting in a high learning poverty rate despite widespread school participation (World Bank, 2024).

Methodology

This study employed a community-based, cross-sectional descriptive research design to localize the World Bank Learning Poverty Framework within a Philippine context. A cross-sectional design was appropriate because it examined population data at a single point in time and was commonly used to estimate prevalence (Wang & Cheng, 2020). Accordingly, the study determined levels of schooling deprivation, learning deprivation, and overall learning poverty in the community using enrollment mapping and reading assessment results, rather than testing causal relationships.

Research setting and participants

The study was conducted in a selected Philippine community characterized by socioeconomic vulnerability, limited educational resources, and persistent challenges in early grade literacy. The setting reflected conditions common in marginalized contexts where age–

grade mismatch and interrupted schooling are prevalent. Data collection was conducted from March 2024 to March 2025.

Participants included 119 school-age learners in the community, aged 4 to 24 years old, spanning Kindergarten to Senior High School and comprising both enrolled learners and out-of-school children. This range was guided by UNESCO's emphasis on early foundational literacy development (ages 0–8) and by the applicability of DIBELS 8 for assessing foundational reading skills from Kindergarten to Grade 8.

In the Philippine context, age–grade mismatch and over-aged enrollment are common due to delayed entry, repetition, interruptions, and pandemic-related disruptions. Consequently, some older learners remain instructionally aligned with early literacy benchmarks. To avoid underestimating learning deprivation, the study used grade- and skill-based inclusion while retaining age data to support interpretation relative to the World Bank age-10 benchmark (Department of Education [DepEd], 2022; World Bank, 2020).

Learners were included if they (a) belonged to the community, (b) were within the school-age range of 4 to 24 years as defined for this study, and (c) were either enrolled in formal or recognized informal education programs (e.g., the Alternative Learning System) or were not enrolled at the time of data collection and therefore classified under schooling deprivation. Participation required informed assent from learners and consent from parents or legal guardians. Learners were excluded if they did not belong to the community, fell outside the defined school-age range, lacked the required consent or assent, or had severe developmental disabilities that would substantially limit meaningful participation in standardized reading assessment.

Instruments

Learning deprivation (LD) was measured using the Dynamic Indicators of Basic Early Literacy Skills (DIBELS 8), a standardized assessment of foundational reading skills for Kindergarten to Grade 8. It assessed key domains such as phonemic awareness, decoding, oral reading fluency, and comprehension. Using established benchmark goals and decision rules, learners who scored below grade-appropriate benchmarks were classified as at risk and interpreted as not meeting minimum reading proficiency, while those meeting or exceeding benchmarks were classified as at or above proficiency and recommended for core instruction. These standardized classifications enabled objective and comparable estimation of learning deprivation.

Data collection

Data collection (March 2024 to March 2025) involved two procedures. First, schooling deprivation was estimated through household-based enrollment mapping and verification of enrolled and out-of-school children using community records. Second, DIBELS 8 assessment was administered individually to enrolled learners by trained assessors following standardized protocols. Supplementary learner- and household-level information was also gathered to document schooling history, grade progression, language background, and contextual factors related to literacy development.

Ethical considerations

Ethical clearance was obtained prior to data collection, and the study was approved by the Research Ethics Committee of MSU-IIT (RICO). This study adhered to the principles of confidentiality, anonymity and transparency in the over-all conduct of the research.

Data analysis

Schooling deprivation and learning deprivation were computed using the World Bank learning poverty framework. Schooling deprivation was calculated as the proportion of school-age children who were out of school, while learning deprivation was calculated as the proportion of enrolled learners who did not meet minimum proficiency benchmarks. Learning poverty was then computed using the World Bank formula: LP = SD + (1 − SD) × LD, where SD = schooling deprivation, LD = learning deprivation, and LP = learning poverty. To ensure transparency and replicability, each indicator was operationalized using measurable definitions, aligned data sources, and explicit computation procedures. Table 1 summarized the operationalization and calculations used in the study.

Table 1. Operationalization of the World Bank Learning Poverty Framework

Component	Indicator	Definition	Data Source	Calculation
Schooling Deprivation (SD)	Proportion of school-age children not enrolled	Share of children excluded from formal schooling and assumed not to reach minimum proficiency	Community enrollment mapping	SD = Out-of-school children ÷ Total school-age children
Learning Deprivation (LD)	Proportion of enrolled learners below foundational reading benchmarks	Share of enrolled learners who fail to meet grade-appropriate DIBELS proficiency	DIBELS 8th Edition	LD = Below-benchmark learners ÷ Total enrolled learners
Learning Poverty (LP)	Combined deprivation indicator	Proportion of children who are either out of school or in school but not learning	Derived	LP = SD + (1 − SD) × LD

Extent of Schooling Deprivation in the Community

This subsection examined schooling deprivation by classifying learners' enrollment status at the time of data collection in accordance with the World Bank Learning Poverty Framework. Table 2 presented the total number of learners surveyed and the proportions enrolled and unenrolled, which were used to estimate the community-level schooling deprivation rate.

Table 2. Extent of Schooling Deprivation in the Community

Indicator	**Value**
Total learners	119
Enrolled learners	91
Unenrolled learners	28
Schooling Deprivation Rate (SD)	23.53%

Schooling deprivation was computed using the World Bank definition, whereby learners classified as unenrolled were considered deprived, while those marked as enrolled were treated as participating in schooling. The World Bank Philippines Learning Poverty Brief published in April 2024 reported that 5 percent of primary school–aged children were not enrolled in school, and children who were out of school were regarded as being below the minimum proficiency level because they were excluded from formal learning opportunities (World Bank, 2024). This rate was three percentage points higher than the average for East Asia and the Pacific and three percentage points lower than the average for lower middle income countries (World Bank, 2024).

In this study, children and youth in the Lanao del Norte community were surveyed, and the results showed a schooling deprivation rate of 23 percent among individuals aged 4 to 24 years old. This indicated that nearly one in four school age individuals in the community was not enrolled in formal schooling. The elevated level of schooling deprivation reflected persistent structural barriers to sustained school participation, particularly among older learners and those in rural and marginalized settings. The concentration of unenrolled learners in the upper primary and secondary levels suggested cumulative educational exclusion, whereby early interruptions in schooling associated with poverty, household labor demands, geographic isolation, and linguistic marginalization intensified over time and resulted in delayed progression, over age enrollment, and eventual disengagement.

Local Philippine research similarly documented enduring barriers to school participation among marginalized and rural learners. A discussion paper from the Philippine Institute for Development Studies reported that although national out of school rates generally declined in recent years, post pandemic conditions continued to create vulnerabilities, especially among older learners and those facing poverty related and geographic constraints (Abrigo et al., 2025). Research on "schoolless barangays" by the Department of Education further highlighted the role of inadequate local educational infrastructure and distance related barriers in limiting enrollment and sustained engagement (Department of Education, 2022). These findings aligned closely with the present study, which documented a 23 percent schooling deprivation rate in the Lanao del Norte community.

At the global level, international monitoring showed that although schooling access improved over previous decades, exclusion remained substantial and progress slowed. UNESCO reported that 251 million children and youth worldwide were out of school, indicating that schooling deprivation persisted despite global efforts toward inclusive education (UNESCO, 2024). Within this broader context, the higher community level deprivation observed in this study illustrated how national averages could mask localized concentrations of disadvantage.

Despite improvements in access, schooling did not guarantee learning. In the Philippines, learning deprivation remained severe, with the World Bank estimating that approximately nine in ten children failed to reach minimum reading proficiency by the end of primary education, contributing to high learning poverty (World Bank, 2024). This evidence showed that while schooling deprivation was a significant concern, the deeper challenge lay in foundational literacy outcomes. Linking enrollment-based measures of schooling deprivation with performance-based measures of learning deprivation through standardized screening tools such as DIBELS therefore provided a more comprehensive understanding of learning poverty and informed targeted interventions addressing both access barriers and persistent reading difficulties.

Extent of Learning Deprivation Based on DIBELS 8

This subsection examined learning deprivation using DIBELS 8 benchmark classifications to assess foundational reading proficiency, with Table 3 presenting the distribution of learners used to estimate the proportion failing to meet minimum reading benchmarks.

Table 3. Learning Deprivation Based on DIBELS 8 Classification (N = 119)

DIBELS 8 classification	**n**	**%**
Core (reading proficient)	9	7.56
Intensive (below proficiency)	110	92.44
Total	119	100.00

Learning deprivation was operationalized using DIBELS 8 benchmark goals and decision rules, which provided standardized cut scores and risk categories for interpreting learners' foundational reading performance. As shown in Table 3, only nine learners representing 7.56 percent met the Core benchmark and were classified as reading proficient, while 110 learners representing 92.44 percent were classified under Intensive support, indicating performance below minimum proficiency and the need for substantial instructional intervention. The resulting learning deprivation rate of 92.44 percent indicated a severe and widespread deficit in foundational reading skills among the assessed learners.

Beyond the magnitude of the deficit, the findings strongly supported the central argument of this study that schooling did not automatically translate into learning. Although education systems often prioritized access indicators such as enrollment and attendance, the results demonstrated that participation in schooling could occur without corresponding mastery of foundational competencies, particularly reading comprehension. This pattern aligned with the World Bank's framing of the learning crisis, which emphasized that the core challenge in many education systems was not simply getting children into school but ensuring that schooling resulted in meaningful learning outcomes World Bank 2018. In the Philippine context, this disconnect was reinforced by national learning poverty estimates showing that a large proportion of children were unable to read and understand a simple text by around age ten despite being enrolled in school World Bank 2024.

From a reading development perspective, the high learning deprivation rate suggested that many learners remained in the stage of learning to read and had not reached the critical

transition to reading to learn. This transition was essential because reading became the primary means through which learners acquired new knowledge across subject areas. When foundational literacy skills were weak, learners experienced difficulties not only in language subjects but also in science, mathematics, and social studies, as they struggled to extract meaning from instructional and assessment texts. The Simple View of Reading explained this pattern by conceptualizing reading comprehension as the product of decoding and language comprehension, indicating that learners failed to comprehend text when word recognition skills, oral language foundations, or both were underdeveloped Gough and Tunmer 1986. In practice, learners who expended excessive cognitive effort on decoding had limited capacity remaining for meaning making, which undermined comprehension and learning from text.

The severity of learning deprivation was further illuminated by Scarborough's Reading Rope, which conceptualized skilled reading as the integration of word recognition strands including phonological awareness, decoding, and automatic word recognition with language comprehension strands such as vocabulary knowledge, background knowledge, verbal reasoning, and literacy knowledge Scarborough 2001. When these strands were not systematically strengthened through instruction and intervention, learners could continue attending school yet fail to develop reading proficiency. The findings therefore underscored that access to schooling alone was insufficient as an indicator of educational progress. Schooling needed to be evaluated based on whether it produced measurable learning outcomes, particularly foundational literacy, because reading proficiency functioned as a gateway skill that enabled learners to participate meaningfully in academic learning.

The community-based findings were consistent with national evidence documenting persistent weaknesses in reading achievement in the Philippines despite years of schooling. Across the country's participation in PISA from 2018 to 2022, reading performance remained consistently low, reinforcing concerns that schooling participation had not translated into improved literacy learning at scale OECD 2019 and OECD 2023a. This sustained underperformance indicated that many Filipino learners struggled to meet minimum reading proficiency levels, reflecting difficulties in interpreting information, extracting meaning, and using texts to support reasoning and learning. The convergence of international assessment results with the present DIBELS 8 findings strengthened the conclusion that learning deprivation in the community reflected a broader national learning challenge.

Overall, the extremely high learning deprivation rate indicated that the most urgent educational challenge in the community was not only ensuring that children were enrolled in school but ensuring that schooling resulted in learning. The findings highlighted the policy importance of prioritizing foundational literacy as a non-negotiable learning outcome and strengthening early grade reading instruction through systematic support, regular assessment, and timely intervention. Without sustained investment in foundational reading skills, learners were likely to continue progressing through grade levels without acquiring the literacy competencies necessary for reading comprehension, academic success, and lifelong learning, thereby sustaining learning poverty and undermining progress toward SDG 4.

Learning Poverty Rate

This subsection integrated schooling deprivation and learning deprivation to estimate the community's overall learning poverty rate using the World Bank Learning Poverty Framework, with Table 4 presenting the computed rates for schooling deprivation, learning deprivation, and the resulting learning poverty estimate.

Table 4. Learning Poverty Rate in the Community

Indicator	**Rate (%)**
Schooling deprivation (SD)	23.53
Learning deprivation (LD)	92.44
Learning poverty rate (LP)	94.30

Learning poverty represented the proportion of children who were either out of school or enrolled but unable to read and comprehend a simple age appropriate text at minimum proficiency. It was computed using the World Bank formula LP equals SD plus one minus SD multiplied by LD World Bank 2019 and 2024. Using the community values of schooling deprivation at 23.53 percent and learning deprivation at 92.44 percent, the learning poverty rate was 94.30 percent, indicating that nearly all children in the community were either excluded from schooling or unable to read with comprehension at the minimum level.

A key finding was that learning deprivation was the dominant contributor to learning poverty. Although nearly one fourth of children experienced schooling deprivation, a much larger share were enrolled yet remained below proficiency, showing that access alone was insufficient to generate foundational learning gains. This pattern reinforced the core message of the learning poverty framework that schooling participation did not guarantee learning, particularly in foundational literacy World Bank 2018. The community results therefore reflected a severe condition of schooling without learning in which time spent in school did not reliably result in the acquisition of essential reading skills.

Relative to national benchmarks, the learning crisis in the community was more severe. The Philippines Learning Poverty Brief reported national learning poverty at approximately 91 percent, with learning deprivation accounting for the largest share and schooling deprivation remaining lower at the national level World Bank 2024. In contrast, the community learning poverty rate of 94.30 percent was higher primarily because schooling deprivation was substantially greater while learning deprivation remained extremely high. This indicated that the community faced a double burden of weaker school participation and persistently low foundational reading proficiency among enrolled learners.

These findings were consistent with national and international assessments documenting persistent reading difficulties among Filipino learners. PISA results from 2018 to 2022 remained consistently low, confirming that increased schooling participation had not translated into improved reading comprehension at scale OECD 2019 and OECD 2023. Early grade evidence from the National Early Grade Reading Assessment also documented weak oral reading fluency and comprehension related skills, indicating that reading difficulties emerged early and persisted without timely instructional support RTI International and Department of Education 2019.

The persistence of learning poverty across grade levels suggested that early reading difficulties compounded over time, consistent with the Matthew Effect in reading Stanovich 1986. Addressing learning poverty therefore required prioritizing foundational literacy as a guaranteed outcome of schooling through explicit and systematic early grade reading

instruction, regular progress monitoring, and targeted remediation for learners below proficiency. Given the magnitude of learning deprivation among enrolled learners, diagnostic based instruction using tools such as DIBELS and sustained support for older learners with long standing literacy gaps were also necessary. At the same time, reducing schooling deprivation required community responsive strategies to strengthen school participation alongside improvements in instructional quality. Without integrated efforts that addressed both access and learning outcomes, learning poverty was likely to persist and continue undermining progress toward SDG 4.

Localized Evidence and Actionable Implications for SDG 4

The community-based learning poverty estimates generated in this study provided strong local evidence that the education challenge extended beyond access to schooling to whether schooling produced meaningful learning, particularly in foundational literacy. Schooling deprivation remained substantial at 23.53 percent, indicating that nearly one in four school-age children were not enrolled in formal schooling. More critically, learning deprivation was extremely high at 92.44 percent, showing that most assessed learners failed to meet minimum reading proficiency benchmarks. When integrated using the World Bank formula, the overall learning poverty rate reached 94.30 percent, indicating that nearly all children in the community were either excluded from schooling or enrolled but unable to read and comprehend age-appropriate texts at a minimum level (World Bank, 2019, 2024).

These findings directly reflected SDG 4 concerns on equity and learning quality. While access to schooling was necessary, it was insufficient when learners remained below minimum reading proficiency, which is central to UNESCO's SDG 4.1.1 indicator on minimum proficiency levels in reading (UNESCO Institute for Statistics, 2026b). Learners who could not read with comprehension were effectively excluded from meaningful learning even when physically present in school.

The community results were consistent with national and international evidence of persistent reading difficulties in the Philippines. PISA results showed consistently low reading performance across cycles, indicating weak comprehension and limited capacity to use text for learning among Filipino learners (OECD, 2019, 2023). National monitoring further reinforced this pattern, as EDCOM II reported very low proficiency rates based on DepEd assessment data, with only 30.52 percent of Grade 3 learners classified as proficient or highly proficient, declining to 1.36 percent in Grade 10 and 0.4 percent in Grade 12, reflecting foundational learning gaps that persisted and compounded across grade levels (EDCOM II, 2026). Early grade diagnostic evidence likewise documented weak oral reading fluency and comprehension related skills among Filipino learners (RTI International and Department of Education, 2019).

Community-level assessment results and national monitoring confirmed that learning poverty reflected not only an enrollment gap but also a severe learning gap in reading comprehension. From a policy perspective, these findings indicated the need to prioritize foundational literacy through systematic early grade instruction, regular diagnostic assessment, and targeted remediation alongside efforts to strengthen school participation. Without such integrated action, learning poverty was likely to persist and continue undermining progress toward SDG 4.

Conclusion and Recommendations

This study localized the World Bank's Learning Poverty Framework to generate community-based estimates of schooling deprivation, learning deprivation, and learning poverty in a Philippine community, highlighting the gap between school participation and actual learning outcomes. The findings showed that schooling deprivation remains substantial, with 23.53% of school-age children not enrolled in formal education. More critically, learning deprivation was extremely high at 92.44%, indicating that most assessed learners did not meet minimum reading proficiency benchmarks. When integrated using the World Bank learning poverty formula, the learning poverty rate reached 94.30%, suggesting that nearly all children in the community are either excluded from schooling or enrolled but unable to read and comprehend age-appropriate texts at a minimum level.

The results demonstrated that expanding access to schooling alone was insufficient when enrollment did not translate into learning. The persistence of learning poverty, even among learners in higher grade levels, indicated that foundational reading difficulties often remain unresolved and compound over time. These findings underscored the urgency of Sustainable Development Goal 4, particularly its emphasis on equitable access, quality learning, and foundational literacy.

Addressing learning poverty required coordinated action among education stakeholders. Teachers, school leaders, parents, local government units, community organizations, and education agencies all played essential roles in addressing both schooling and learning deprivation and in ensuring consistent learning opportunities for learners most at risk of exclusion and long-term learning failure.

In conclusion, this study provided localized evidence that learning poverty in the community was critically high and driven primarily by learning deprivation among enrolled learners, alongside significant schooling deprivation. Reducing learning poverty would require sustained efforts to strengthen foundational literacy instruction, improve monitoring and support systems, and mobilized stakeholders toward inclusive and evidence-based actions aligned with SDG 4.

Several limitations should be acknowledged. The study was conducted in a single community, which could limit the generalizability of the findings, and relied on cross-sectional data that might not capture changes in learner performance over time or the effects of ongoing interventions. The findings should therefore be interpreted as localized evidence valuable for community-level planning. Future studies should extend this approach across multiple communities and regions, including diverse rural, urban, and indigenous contexts.

Based on the findings, several recommendations were proposed to address learning poverty and strengthen foundational reading outcomes in the community.

Foundational reading should be prioritized as a core outcome of schooling, particularly in the early grades, to ensure that learners acquire essential decoding, fluency, and comprehension skills before progressing to higher-grade academic demands. Instruction should be systematically aligned with learners' demonstrated skill levels and supported by continuous monitoring through evidence-based assessment tools to enable timely instructional adjustments and prevent early learning difficulties from persisting.

Structured instructional support should be provided for learners who remained below proficiency, including those in intermediate, junior high school, and senior high school levels. The presence of learning deprivation across grade bands indicated the need for organized catch-up learning approaches that address accumulated foundational reading gaps and are embedded within regular schooling to ensure continuity and sustainability.

Efforts to reduce learning poverty should address both schooling participation and learning quality. Community-based identification and re-engagement mechanisms should be strengthened to support out-of-school children and youth in returning to schooling or participating in alternative learning pathways. At the same time, instructional quality for enrolled learners must be improved to ensure that school attendance leads to measurable learning gains rather than continued learning deprivation.

Coordinated and evidence-informed action among education stakeholders including teachers, school leaders, parents, local government units, community organizations, and education agencies must be essential to provide consistent learning opportunities inside and outside the classroom and to advance progress toward Sustainable Development Goal 4.

Declaration of generative AI and AI-assisted technologies in the manuscript preparation process

During the preparation of this work the author used ChatGPT 5.2 in order to refine the language, enhance clarity, and ensure academic coherence. After using this tool/service, the author reviewed and edited the content as needed and takes full responsibility for the content of the published article.

References

Abrigo, M. R. M., Gardoce, C. J. M., Kintanar, A. A. M., & other authors. (2025). *Out-of-school children in the Philippines: Post-pandemic realities and emerging challenges at the educational spectrum extremes* (PIDS Discussion Paper). Philippine Institute for Development Studies.

Albert, J. R. G., & David, C. C. (2015). *Recent trends in out-of-school children in the Philippines* (PIDS Discussion Paper Series No. 2015-51). Philippine Institute for Development Studies.

Department of Education. (2019). *PISA 2018 Philippine national report.* Department of Education, Republic of the Philippines.

Department of Education. (2022). *Basic Education Development Plan 2030* (DepEd Order No. 024, s. 2022). Department of Education, Republic of the Philippines.

Department of Education. (2022, March 16). *DepEd ROI researches "schoolless barangays," aims more comprehensive access to enhanced basic education.* https://www.deped.gov.ph/2022/03/16/deped-roi-researches-schoolless-barangays-aims-more-comprehensive-access-to-enhanced-basic-education/

Department of Education. (2026). *Reading competence among Grade 8 readers: Basis for enhanced reading program in the new normal education.* DepEd e-Saliksik. Retrieved January 20, 2026, from https://e-saliksik.deped.gov.ph/reading-competence-among-grade-8-readers-basis-for-enhanced-reading-program-in-the-new-normal-education/

Formento, C. P. (2023). Improving the reading performance level of Grades 4 to 6 struggling readers in English through Project 2TK. *E-Journals.ph.* https://ejournals.ph/article.php?id=22153

Good, R. H., Kaminski, R. A., Cummings, K. D., Dufour-Martel, C., Petersen, K., Powell-Smith, K. A., Zurek, M., & Stollar, S. (2024). *DIBELS 8th edition administration and scoring guide.* University of Oregon, Center on Teaching and Learning.

Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education, 7*(1), 6–10. https://doi.org/10.1177/074193258600700104

Orbeta, A. C., Jr., & Paqueo, V. B. (2020). *Correlates of test performance of 15-year-old students in the Philippines: Results from PISA 2018* (PIDS Discussion Paper Series No. 2020-57). Philippine Institute for Development Studies.

Organisation for Economic Co-operation and Development. (2019). *PISA 2018 results (Volume I): What students know and can do.* OECD Publishing. https://doi.org/10.1787/5f07c754-en

Organisation for Economic Co-operation and Development. (2023). *PISA 2022 results (Volume I): The state of learning and equity in education.* OECD Publishing. https://doi.org/10.1787/53f23881-en

Organisation for Economic Co-operation and Development. (2023). *PISA 2022 results: Country note – Philippines.* OECD. https://www.oecd.org/en/publications/pisa-2022-results-volume-i-and-ii-country-notes_ed6fbcc5-en/philippines_a0882a2d-en.html

Philippine Statistics Authority. (2024). *Functional literacy, education and mass media survey (FLEMMS): Final results*. Philippine Statistics Authority. https://psa.gov.ph/statistics/survey/labor-and-employment/flemms

Pao, K. (2024). Oral and silent reading proficiency and academic performance in English among Grade Seven learners: Enhanced reading remediation program. *E-Journals.ph.* https://ejournals.ph/article.php?id=28392

RTI International, & Department of Education. (2019a). *2019 national early grade reading assessment (EGRA): English and Filipino, Grade 3 findings.* RTI International. https://shared.rti.org/content/2019-national-early-grade-reading-assessment-egra-english-and-filipino-grade-3-findings

RTI International, & Department of Education. (2019b). *2019 national EGRA report (English and Filipino, Grade 3).* RTI International. https://ierc-

publicfiles.s3.amazonaws.com/public/resources/2019%20National%20EGRA%20Report_Submitted%20Sept%2030.pdf

RTI International, & Department of Education. (2019c). *Regional early grade reading assessment (EGRA): Philippines (selected Philippine languages).* RTI International. https://ierc-publicfiles.s3.amazonaws.com/public/resources/PA00WKGV_FinalDEC%20Version%20Regional%20EGRA.pdf

Scarborough, H. S. (2001). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research* (pp. 97–110). Guilford Press.

Second Congressional Commission on Education (EDCOM II). (2024). *Miseducation: The failed system of Philippine education (EDCOM II Year One Report).* https://edcom2.gov.ph/media/2024/02/EDCOM-II-Year-One-Report-PDF-022924.pdf

Second Congressional Commission on Education (EDCOM II). (2025). *Fixing the foundations: A matter of national survival (EDCOM II Year Two Report).* https://edcom2.gov.ph/media/2025/01/EDCOM-2-Year-2-Report-Fixing-the-Foundations-2025.pdf

Second Congressional Commission on Education (EDCOM II). (2026, January 16). *Student proficiency rates plunge from 30% in Grade 3 to 0.47% in Grade 12.* https://edcom2.gov.ph/student-proficiency-rates-plunge-from-30-in-grade-3-to-0-47-in-grade-12/

Seguros, R. Y. (2025). Perceptions of teachers on the implementation of the national reading program. *Cognizance Journal, 5*(5). https://cognizancejournal.com/vol5issue5/V5I599A8.pdf

Southeast Asia Primary Learning Metrics. (2024). *SEA-PLM 2024 main regional report.* UNICEF East Asia and Pacific Regional Office. https://www.unicef.org/eap/reports/sea-plm-2024-main-regional-report

Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly, 21*(4), 360–407. https://doi.org/10.1598/RRQ.21.4.1

UNESCO. (2026). *Monitoring SDG 4: Learning outcomes (SDG indicator 4.1.1).* Global Education Monitoring Report. Retrieved January 20, 2026, from https://www.unesco.org/gem-report/en/assessment-learning-outcomes

UNESCO Institute for Statistics. (2026a). *UIS Data Browser.* UNESCO. Retrieved January 20, 2026, from https://databrowser.uis.unesco.org/

UNESCO Institute for Statistics. (2026b). *What is the definition of minimum proficiency level in reading and mathematics used to measure performance on indicator 4.1.1?* Learning Data Resource Center. Retrieved January 20, 2026, from https://learningdata.uis.unesco.org/index.php/navigator/what-are-the-sustainable-development-goals/1-3-what-is-the-definition-of-minimum-proficiency-level-in-reading-and-mathematics-used-to-measure-performance-on-indicator-4-1-1/

UNICEF, UNESCO, United States Agency for International Development, Foreign, Commonwealth & Development Office, Bill & Melinda Gates Foundation, & World Bank. (2023). *RAPID: A framework to accelerate foundational learning.* UNICEF. https://www.unicef.org/media/154671/file/RAPID%20Framework.pdf

Wang, X., & Cheng, Z. (2020). Cross-sectional studies: Strengths, weaknesses, and recommendations. *Chest, 158*(1S), S65–S71. https://doi.org/10.1016/j.chest.2020.03.012

World Bank. (2018). *World development report 2018: Learning to realize education's promise.* World Bank. https://www.worldbank.org/en/publication/wdr2018

World Bank. (2019). *Ending learning poverty: What will it take?* World Bank. https://doi.org/10.1596/32553

World Bank. (2021, April 28). *What is learning poverty?* https://www.worldbank.org/en/topic/education/brief/what-is-learning-poverty

World Bank. (2021, July 1). *Learning poverty measure.* https://www.worldbank.org/en/topic/education/brief/learning-poverty-measure

World Bank. (2024). *Philippines: Learning poverty brief (English).* World Bank Group. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099090524085540633

World Bank. (2026). *Children out of school (% of primary school age) – Philippines (SE.PRM.UNER.ZS).* World Development Indicators. Retrieved January 20, 2026, from https://data.worldbank.org/indicator/SE.PRM.UNER.ZS?locations=PH

Appendix A

Distribution of Participants (N = 119)

Grade Band	Total (n)	Enrolled (n)	Not Enrolled (n)	At Risk (n)	Negligible Risk (n)	Intensive Support (n)	Core Support (n)
Kindergarten (K1)	9	9	0	9	0	9	0
Grade 1	4	4	0	3	0	4	0
Grade 2	7	4	3	6	1	6	1
Grade 3	10	10	0	9	1	9	1
Grade 4	11	10	1	10	1	10	1
Grade 5	9	6	3	7	1	8	1
Grade 6	9	2	7	7	0	8	0
Grade 7	10	8	2	6	3	7	3
Grade 8	13	8	5	10	0	13	0
Grade 9	6	3	3	5	1	6	0
Grade 10	7	0	7	7	0	7	0
Grade 11	2	0	2	2	0	2	0
Grade 12	22	22	0	22	0	22	0
Total	119	86	33	103	8	112	8

Note. DIBELS 8th Edition classifies learners into *At Risk* and *Negligible Risk* categories based on benchmark cut scores. *At Risk* learners are unlikely to meet end-of-year reading benchmarks without additional support, whereas *Negligible Risk* learners are expected to meet benchmarks with regular instruction. *Core* support refers to standard grade-level instruction, and *Intensive* support refers to targeted intervention beyond core instruction. *Enrolled* indicates learners enrolled in schooling, while *Not Enrolled* indicates unenrolled learners. beyond core instruction. "Enrolled" includes learners classified as Enrolled in the dataset, while "Not Enrolled" includes learners classified as Unenrolled.

Appendix B

Sample Learners' DIBELS 8 Subtest Scores and Reading Indicators

Grade Level	LNF	PSF	NWF CLS	NWF WRC	WRF	ORF Words Correct	ORF Errors	ORF Accuracy	Maze Correct	Maze Incorrect	Maze Adjusted
K1	10	0	0	0	0	X	X	X	X	X	X
K1	8	0	0	0	0	X	X	X	X	X	X
K1	0	0	0	0	0	X	X	X	X	X	X
G1	80	5	0	0	0	0	0	X	X	X	X
G1	55	0	0	0	0	0	0	X	X	X	X
G2	X	X	12	4	6	12	21	36.36	0	0	0
G3	X	X	128	40	50	149	26	85.14	36	15	28.50
G4	X	X	X	X	X	219	2	99.10	51	3	49.50
G5	X	X	X	X	X	282	2	99.30	63	2	62.00
G6	X	X	X	X	X	126	20	86.30	22	30	7.00
G7	X	X	X	X	X	279	0	100.00	56	4	54.00
G8	X	X	X	X	X	60	45	57.14	3	32	-13.00
G9	X	X	X	X	X	302	5	98.37	33	20	23.00
G10	X	X	X	X	X	301	5	98.37	58	0	58.00
G11	X	X	X	X	X	79	76	50.97	16	30	1.00
G12	X	X	X	X	X	242	21	92.02	45	8	41.00

Note. LNF = Letter Naming Fluency; PSF = Phonemic Segmentation Fluency; NWF CLS = Non-Word Fluency Correct Letter Sounds; NWF WRC = Non-Word Fluency Words Read Correctly; WRF = Word Reading Fluency; ORF = Oral Reading Fluency; Maze = Maze Comprehension. "X" indicates subtests not administered for that grade level under the DIBELS 8th Edition assessment sequence. These measures were used to classify learners into DIBELS risk categories. Learners categorized as "At Risk" demonstrate performance below benchmark expectations and require support beyond core classroom instruction. In this study, the DIBELS "At Risk" classification was used as a proxy indicator of learning deprivation, and the recommended instructional level (Core, Strategic, or Intensive) was reported as "Support Type" to reflect the intensity of intervention required.

DIBELS 8th Edition includes a grade-appropriate sequence of subtests designed to monitor foundational reading development from early literacy to comprehension. Kindergarten and Grade 1 emphasize early indicators such as letter naming and phonemic awareness, while Grades 2 to 3 include decoding and word reading measures that reflect developing automaticity. In higher grades, oral reading fluency and Maze comprehension become central indicators of reading proficiency because learners are expected to transition from foundational decoding toward fluent, meaning-focused reading. Therefore, the presence of "X" values in the dataset does not reflect missing data but reflects the standard DIBELS 8th Edition administration pattern. The DIBELS risk classification is interpreted instructionally, where learners identified as "At Risk" are likely to miss future reading benchmarks without additional intervention. As such, "Support Type" (Core, Strategic, Intensive) was used to reflect the level of instructional response required for learners based on their risk classification and performance profile.