

Multi-tiered Systems of Support (MTSS): Literacy in Focus

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Date Submitted:
March 14, 2026

Date Accepted:
April 29, 2026

Date Published:
May 13, 2026

DOI:
10.5281/zenodo.20152560

ABSTRACT

The results of the Program for International Student Assessment (PISA) revealed that the Philippines is among the lowest-performing countries in Reading, Math, and Science. This result became a wake-up call for the Department of Education to intensify literacy efforts to address this issue. As a consequence, many programs and projects were implemented in the field. However, despite consistent literacy efforts, the prevalence of struggling readers continues to be a challenge in the education system. To harmonize these interventions and to ensure a systematic approach for literacy development, Cabalawan Elementary School adapted a Multi-Tiered Systems of Support (MTSS) framework to address literacy gaps. This adheres to the principle of giving targeted intervention to learners depending on the kind of support they

need. Tier 1 uses a universal intervention or an intervention that is given to all. It includes the activities that are usually done during learning time. Tier 2 is given to those who need moderate support. These are the learners who did not respond positively to Tier 1. The existing Project DALaN (Differentiated Instruction in Literacy and Numeracy) of the school was used as Tier 2. Other division and regional programs were embedded in Tier 2 as a support mechanism. Tier 3 is applied to the learners who require intensive support. They are the learners who did not respond well to Tier 1 and Tier 2. The Academic Recovery and Accessible Learning (ARAL) program was used as Tier 3. In addition, the existing Project BISLIG (Barangay Intervention to Strengthen Learner Involvement and Grit), which includes the barangay in tracking the academically disengaged learners, was also included in Tier 3. To test its effectiveness, the results of the Comprehensive Rapid Literacy Assessment (CRLA) for Key Stage 1 (G1-G3) and the Philippine Informal Reading Inventory (PHIL-IRI) for Key Stage 2 (G4 to G6) were compared. Results revealed that the number of low-emerging learners in KS1 and the frustration level of readers for KS2 significantly decreased. Moreover, the grade-ready and instructional level readers increased substantially. With a *p-value* of 0.0001 across all reading categories and Key Stages confirm that there is indeed a significant difference in the results after the intervention. Therefore, the MTSS framework is effective in improving the literacy level of the learners.

Keywords: *Multi-tiered Systems of Support, Tier 1, Tier 2, Tier 3*

INTRODUCTION

Reading is a fundamental skill essential not only for academic success but also for everyday life. From studying in school to using mobile phones and understanding information in daily transactions, reading plays a vital role in human functioning. Unlike spoken language, which develops naturally, reading must be explicitly taught to help learners develop decoding, fluency, vocabulary, and comprehension skills (Hughes & Riccomini, 2022). Hence, teaching children how to read is not merely a professional responsibility of teachers but a moral obligation to ensure that learners are equipped with the skills necessary for lifelong learning and meaningful participation in society.

Despite continuous literacy efforts, reading difficulties remain a persistent challenge in the Philippine education system. The results of the Program for International Student Assessment (PISA) in 2018 and 2022 revealed that the Philippines ranked among the lowest-performing countries in Reading, Science, and Mathematics, with learners reportedly lagging by approximately five to six years of schooling. In response, the Department of Education implemented numerous literacy and numeracy initiatives at the regional, division, and school levels, such as Project BULIG, Project STAR, KFELT, Project PROWESS, and the recently mandated Academic Recovery and Accessible Learning (ARAL) Program under Republic Act 12028. While these programs aim to address learning gaps, their simultaneous implementation often becomes overwhelming for teachers, particularly at the grassroots level.

To harmonize these interventions and ensure a systematic approach to literacy development, Cabalawan Elementary School adapted the Multi-Tiered Systems of Support (MTSS) framework. Anchored on a previous study conducted by the researcher during the pandemic (Acedillo, 2021), the school contextualized MTSS for literacy improvement in School Year 2025–2026. MTSS integrates universal assessment, differentiated intervention levels, and data-driven decision-making to provide targeted support for struggling readers. Within this framework, Project DALaN serves as the school's Tier 2 intervention, offering intensive reading support, regular learner monitoring, collaboration among teachers, and annual reading assessments for learners from Grades 1 to 6. Over three years of implementation, the project significantly reduced the number of non-readers, particularly in Key Stage 2, where zero non-readers were recorded in the PHIL-IRI pretest results. However, many learners remained at the emerging and frustration levels in reading, indicating continuing difficulties in fluency and comprehension.

To address these remaining gaps, the strengthened implementation of DALaN for School Year 2025–2026 focused on improving higher-order reading skills while embedding other literacy initiatives such as Project PROWESS and ARAL. The school also promoted a culture of reading through the rehabilitation of the school library, weekly library periods, and classroom reading nooks. Learners who required more intensive intervention underwent Tier 3 support through ARAL tutorial sessions and Project BISLIG, which involved collaboration with barangay officials to monitor and support academically disengaged learners. Guided by the MTSS framework, this study investigated the effectiveness of the school's literacy interventions using standardized tools such as CRLA (Comprehensive Rapid Literacy Assessment) for Key Stage 1 and PHIL-IRI (Philippine Informal Reading Inventory) for Key Stage 2. Specifically, for Key Stage 1, the Mother Tongue results were used as a basis since this is the only language common to Grades 1-3. Grade 1 has no English assessment, and Filipino only starts in Grade 2. The findings of the pretest and posttest assessments served as the basis for determining the effectiveness of MTSS in improving learners' literacy levels at Cabalawan Elementary School during School Year 2025–2026.

METHODS

Below is the detailed description of the systematic process undertaken to unveil the answers to the core problem guiding this study, which is to ascertain the effectiveness of MTSS in improving the literacy level of the G1 to G6 pupils of Cabalawan Elementary School.

Research Design

A quasi-experimental design was used to describe the effects of MTSS in improving the literacy level of G1-G6 pupils of Cabalawan Elementary School. A quasi-experiment is an empirical study used to estimate the causal impact of an intervention on its target population without random assignment (Gopalan, Rosinger & Ahn, 2020). This method is deemed appropriate to ascertain the effects of MTSS as it redirects its focus to literacy. The basis for determining the effectiveness of MTSS in literacy is the pretest and posttest results in CRLA for KS1 and PHIL-IRI for KS2. These are both standardized assessment tools. This pretest was conducted in August 2025. The MTSS: Literacy in Focus was implemented from September 2025 to February 2026. The posttest was conducted in February 2026.

Research Locale

This study covers all Grades 1-6 classes of Cabalawan Elementary School of the Division of Tacloban City. It has a population of 420 learners. However, since Kindergarten is not included in this study, only 354 pupils were the subjects of this study. These pupils are coming from the different zones of the Brgy. 97, Cabalawan, Tacloban City, specifically near San Juanico Bridge. The majority of them belong to a low-income household. There are 12 sections in Cabalawan ES. Each grade level has 2 sections. The sections/classes involved in this research are intact.

Sampling Technique

All classes from G1 to G6 were purposefully identified since literacy instruction is imperative for every learner. Even those who are already at the grade-ready or independent level were not exempted from the reading instruction. They were given enrichment lessons instead. In furtherance, though DALaN includes numeracy in its banner, literacy is the only focus of this study. Numeracy activities are still included, but as a separate entity.

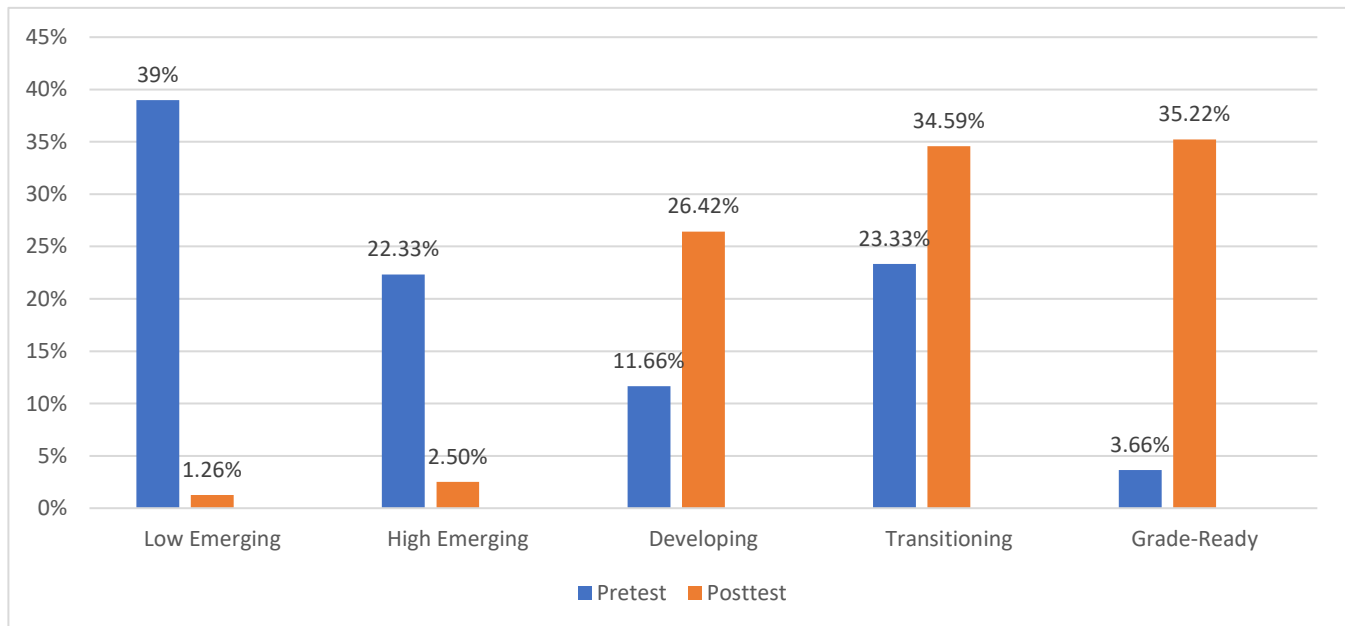
RESULTS AND DISCUSSIONS

After conducting a thorough investigation, the following results were obtained. They are presented in a graphical presentation followed by textual discussions.

Pretest and Posttest Literacy Results for Key Stages 1

The CRLA results for Key Stage 1 (Grades 1-G3) reveal a significant difference in the pretest and posttest. It can be gleaned that during the pretest, the majority of the learners were on the low-emerging and high-emerging levels, with 39% and 22.33% results, respectively. These are learners who lack phonological and phonemic awareness as well as basic decoding skills. Only 3.66% of the G1-G3 learners are grade-ready, or those who can read at their grade level independently. However, these results were the opposite during the posttest because 35.22% were already grade-ready, while only 1.26% were low emerging and 2.50% high emerging.

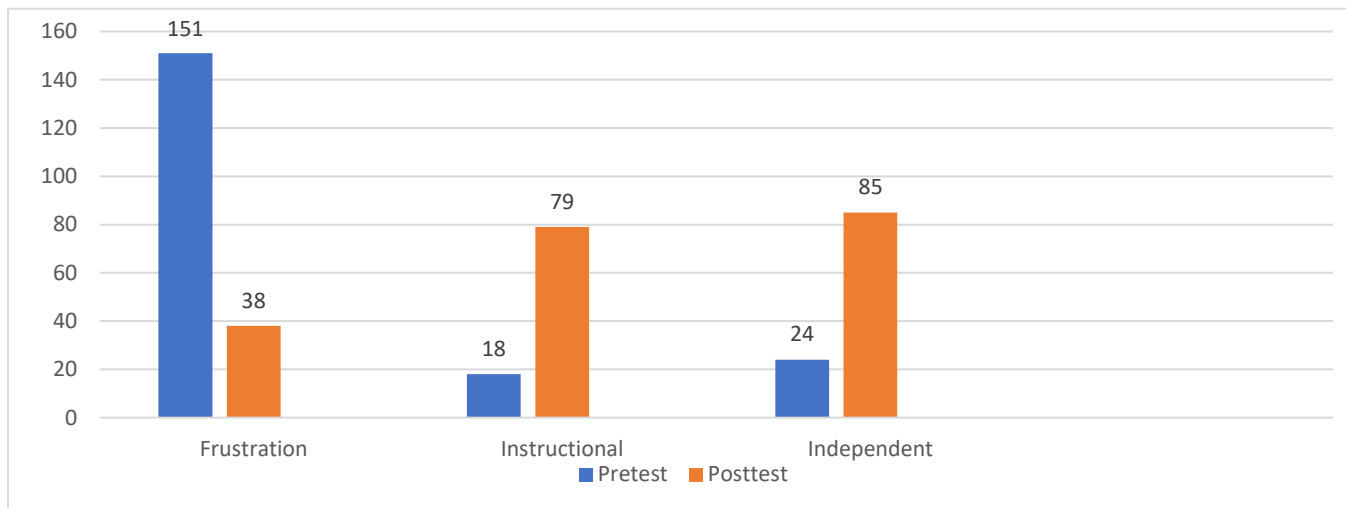
Table 1: CRLA Pretest and Posttest Results for Key Stage 1 (G1-G3)



Pretest and Posttest Literacy Results for Key Stages 2

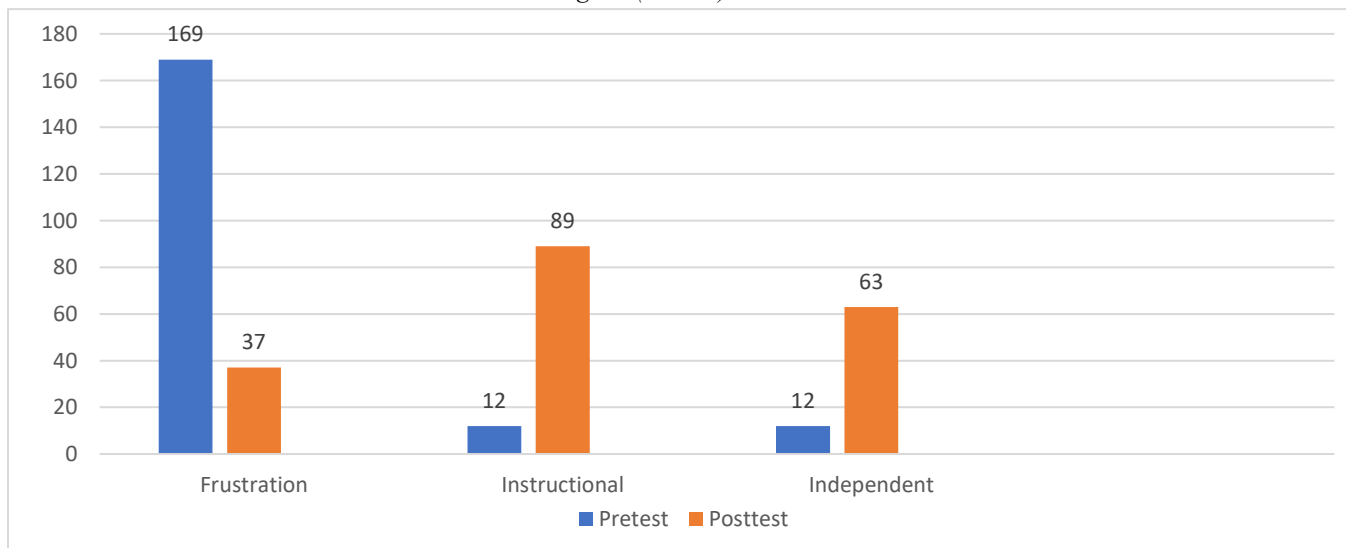
The Key Stage 2 (G4-G6) PHILI-IRI results in Filipino also bear a significant decrease in the frustration-level readers and an increase in the instructional and independent readers. From 151 learners in the frustration level, it was reduced to 38. In the context of Cabalawan Elementary School, pupils in the frustration level are pupils equipped with basic decoding skills but lack fluency and comprehension since the school has zero non-readers in this Key Stage for S.Y. 2025-2026. It is also noticeable that the number of pupils in the instructional level (pupils who can read at their grade level but need guidance) and independent readers (pupils reading at their grade level independently) increased significantly.

Table 2: *PHILI-IRI Pretest and Posttest Results in Filipino (G4-G6)*



For English, although the results were a bit lower than those of Filipino, they also show a decrease in the number of frustration level readers and a leap in the instructional and independent readers. This implies a positive result of MTSS in improving the literacy level of the learners in Key Stage 2 for English. This result can be attributed to the fact that English as a second language for the KS2 learners could have influenced this result.

Table 3: *PHILI-IRI Pretest and Posttest Results in English (G4-G6)*



Differences in the Literacy Results in Key Stage 1 and Key Stage 2

With a *p-value* of 0.0001 across all reading categories, it can be inferred that there is indeed a significant difference in the literacy results of Grades 1-3. These results imply that MTSS with a focus on literacy was indeed effective in improving the literacy level of the pupils in Key Stage 1.

Table 4: *Difference in the CRLA Results for Key Stage 1*

Category	χ^2 (Chi-Square)	df	p-value	Interpretation
Low Emerging	37.74	1	< 0.0001	Significant
High Emerging	19.83	1	< 0.0001	Significant
Developing	14.76	1	< 0.0001	Significant
Transitioning	11.26	1	< 0.0001	Significant
Grade-Ready	31.56	1	< 0.0001	Significant
Overall	84.74	4	< 0.0001	Significant

A similar inference can be made from the PHIL-IRI results for both English and Filipino. With a *p-value* of 0.0001 across all reading categories, there is a significant difference in the results after implementing the MTSS or Multi-Tiered Systems of Support with a specific focus on literacy. The targeted intervention given to pupils, depending on the kind of support needed, was indeed instrumental in improving their literacy level.

Table 5: *Difference in the PHIL-IRI Results for Key Stage 2*

Categories	X ² Chi-Square)		df		p-value		Interpretation	
	Fil	Eng	Fil	Eng	Fil	Eng	Fil	Eng
Frustration	113.00	132.00	1	1	< 0.0001	< 0.0001	Significant	Significant
Instructional	61.00	77.00	1	1	< 0.0001	< 0.0001	Significant	Significant
Independent	61.00	51.00	1	1	< 0.0001	< 0.0001	Significant	Significant
Overall	235.00	260.00	2	2	< 0.0001	< 0.0001	Significant	Significant

CONCLUSION

Based on the findings of the study, it can be concluded that the implementation of the Multi-Tiered Systems of Support (MTSS) with a focus on literacy significantly improved the reading performance of learners in both Key Stage 1 (G1–G3) and Key Stage 2 (G4–G6). The pretest and posttest results revealed significant improvements in the literacy levels of the pupils after the intervention.

For Key Stage 1, the CRLA results showed a remarkable decrease in the number of learners categorized as low emerging and high emerging readers, while the number of grade-ready learners increased significantly during the posttest. This indicates that the learners developed better phonological awareness, decoding skills, fluency, and comprehension after participating in the literacy interventions under MTSS. Similarly, the PHIL-IRI results for Key Stage 2 in both Filipino and English demonstrated a considerable reduction in frustration-level readers and an increase in instructional and independent readers. These results suggest that the targeted and differentiated interventions provided through MTSS effectively addressed the learners' specific literacy needs and enhanced their reading comprehension and fluency.

Furthermore, the *p-values* of 0.0001 in the pretest and posttest across all reading categories in both Key Stages indicate a statistically significant difference in the results. This confirms that the observed improvements were not due to chance but were the result of the MTSS literacy interventions. Therefore, the study concludes that MTSS is an effective approach in improving learners' literacy skills and reading proficiency. The implementation of structured, targeted, and responsive literacy interventions contributed greatly to the development of pupils' reading abilities and helped move learners toward instructional and independent reading levels.

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