

Impact of Project Smart on the Reading Proficiency of San Guillermo Elementary Learners Through Data-Driven Assessment and Strategic Instruction

Jonna May D. Casalme, Argel R. Doctora, Rocelyn D. Tenorio

San Guillermo Elementary School, Batangas Province

Abstract- This action research study examined the impact of Project SMART on learners' reading proficiency at San Guillermo Elementary School during the 2024–2025 school year. This research utilizes a descriptive-quantitative approach. Moreover, the study focused on the 107 learners from Grades 1–6 who were assessed through pre- and post-test reading tests in English and Filipino. The SMART project intervention focuses more on data-driven assessment, meaning teachers use data to guide their instruction and help students become proficient readers. Additionally, they employ strategic interventions to help learners fully develop their decoding and reading proficiency. This phase enabled teachers and learners to tailor reading to individual learners' needs. Pre-test results revealed that a large proportion of pupils are slow, struggling, and non-readers, while 23.26% are fast readers in English and 28.04% in Filipino. Following the implementation of the guided oral reading approach, reading drills were conducted. Post-test data revealed a notable increase in fast readers, 36.64% in English and 37.38% in Filipino. There is also a significant decrease in non-reader learners in both subjects; however, there is still one. In line with the Department of Education's thrust toward foundational literacy, the study concluded that Project SMART serves as an impactful, sustainable framework for developing progressive and independent readers. It is recommended to monitor progress further, modify instruction, and strengthen community partnerships to sustain reading growth and institutionalize the gains of the SMART achievement project.

Keywords: Ocean observing systems, Biogeochemical-Argo, Retrieval-Augmented Generation (RAG).

I. INTRODUCTION

Reading, as one of the four macro skills, is the most important yet often overlooked skill among 21st-century learners. The Department of Education is committed to its mission to ensure that no one is left behind in reading. Reading programs aim to empower teachers to bridge the reading gap and unlock learners' potential, enabling them to become proficient readers and leaders in their future endeavors.

Recent research emphasizes that reading is one of the core literacy skills that requires systematic attention and development. As Dawang et al. (2025) stated, reading development requires intensive exposure to text, underscoring that both data-driven and strategically guided approaches are required. These assessments have been consistently demonstrated to help evaluate learners' reading performance, enabling teachers to craft targeted reading instruction that reduces reading anxiety, develops reading fluency, and improves

decoding skills. Data-driven assessments that inform planning, monitoring, and instructional adjustments are a cornerstone of an effective literacy program. Learners in the Philippines' public schools have been experiencing reading anxiety and require suitable reading support to help them improve their comprehension and reading skills. Moreover, Ocangas and Gawahan (2025) highlighted the strategic instructions.

This approach to reading assessment helps learners through explicit modeling, providing guided practice and immediate feedback that directly influences their decoding and fluency skills. In conclusion, teachers' practices, specifically the use of explicit modeling guided by continuous support and feedback, have a direct effect on the overall reading skills of Filipino learners. This highlights the importance of guided instructional support in reading, offering a clear path forward for educators, stakeholders, and policymakers.

According to the Reading national data, while the Philippines has consistently maintained a strong introductory literacy rate of 93.1%, only 70.8% of learners can be considered functionally literate. The gap highlights the need for a data-driven reading program that addresses not only decoding but also the application of reading skills.

Thus, Rebellos (2024) concluded that vocabulary knowledge and motivation can significantly affect learners' reading skills in grades 4-6. Reading as an instruction must integrate both language enrichment, a crucial component, and assessment-based monitoring. That can be an example of how Project MaKaBaTa, which aims to change to Project SMART, is now honing its focus to strengthen reading ability as a skill. Idulog (2025) noted that the most significant challenges for Filipino learners affect their reading abilities, and that continuous teacher-led intervention remains the most effective way to improve them.

In response to the Department of Education (DepEd)'s needs, San Guillermo Elementary School consistently initiates developmental programs to enhance access to reading practices (DepEd, 2024). This aims to support teachers' competencies in reading instruction, helping them deliver a reading assessment necessary for learners to achieve zero non-readers. This is a goal we are unwaveringly committed to, demonstrating our determination and dedication to improving literacy rates.

This is the sole reason that affirms that data-driven assessment and instruction are strategically essential for improving learners' reading readiness and proficiency. Project SMART, the newly developed reading program at San Guillermo Elementary School, aligns its mission with empowering learners and ensuring that every learner becomes a confident and independent reader. This is a goal that every learner is steadfastly committed to achieving, demonstrating our unwavering dedication to their literacy development.

Furthermore, Project SMART is the blueprint and backbone of Project MaKaBaTa, with a stronger focus on data-driven assessment and strategic

instruction centered on reading fluency, skills, and abilities. While Project MaKaBaTa addressed foundational reading challenges related to the effects and aftermath of the pandemic, Project SMART focused on the impact of a structured, data-driven assessment approach. The development from MaKaBaTa to SMART demonstrates the school's ongoing effort to transform reading support into a more results-oriented, research-based initiative.

This action research specifically discussed the Impact of Project Smart On The Reading Proficiency Of San Guillermo Elementary Learners Through Data-Driven Assessment And Strategic Instruction. The action research asks the following question.

1. What is the result of the pre-test reading assessment of SGES learners? In terms of;
 - 1.1. English
 - 1.2. Filipino
2. What is the result of the post-test pre-test reading assessment of SGES learners in terms of?; and
 - 2.2 English
 - 2.3 Filipino
3. How do the results of the pre-test and post-test reflect the impact of data-driven assessment and strategic instruction used in Project SMART?
4. Based on the findings, what action plan may be proposed to enhance the implementation of Project SMART and further elevate the reading skills of learners?

San Guillermo Elementary School believed in the principles through the Project SMART initiative. The program operationalizes data-driven assessment and strategic instructions that enhance reading proficiency by identifying and profiling each learner's starting point. To strengthen reading proficiency, decoding skills are provided with interventions that continuously track progress. This is a structured approach that ensures no learner remains a non-reader and that all learners achieve measurable reading proficiency.

II. METHODS

This describes the nature of the study in terms of research design, respondents of the study, research

instrument, data gathering procedure, and the statistical treatment used for analyzing the data and information. This further explains the methodologies employed in the study

Study Design

The study used a descriptive-quantitative method. According to Sirisilla (2023), it is a useful tool for the researcher to gather information about a particular group and phenomenon. This provides detailed and accurate information about the characteristics and behaviors of a particular subject.

Participants

The subject of this study covered the 107 learners enrolled in the School year 2024-2025.

Grade level	Enrolment
Grade I	16
Grade II	17
Grade III	20
Grade IV	14
Grade V	17
Grade IV	23
Total	107

Data Gathering Instrument

The study utilized school-based reading assessment tools aligned with the Comprehensive Rapid Literacy Assessment (CRLA) and Phil-IRI standards,, as well as teachers'-made reading tools to measure reading proficiency in English and Filipino.

Procedure

A pre-test reading assessment was conducted during the first quarter to determine learners' baseline reading levels. Continuous monitoring and reading interventions, such as guided oral reading and reading drills, were implemented during the second quarter and third quarters, and the post-test assessment was conducted in the fourth quarter to measure improvements in reading proficiency.

Data Analysis

The collected data were analyzed using frequency and percentage to determine changes in learners' reading levels between the pre-test and post-test.

III. RESULTS AND DISCUSSION

This deals with the components of the statement of the problem. It presents the numerical data gathered in the investigation. Included are the interpretation of data with corresponding justification. The analysis results are presented in a manner that organizes the problem statement.

Pre-Test Result of English Reading Assessment

Reading Level	Learners	Percentage
Fast	25	23.36%
Average	32	29.91%
Slow	26	24.29%
Struggling	10	9.35%
Non-readers	14	13.08%
Total	107	100%

The English pre-test revealed that many learners are categorized as slow, struggling, and non-readers. The English pre-test results show that a majority of learners were classified as Slow, Struggling, or Non-Readers across grade levels. Specifically, only 23.36% of learners, or 25 learners, were Fast readers, while 29.91%, or 32 learners, were Average, 24.29%, or 26 learners, were Slow, 9.35%, or 10 learners, were Struggling, and 13.08%, or 14 learners, were Non-Readers. This indicates that San Guillermo elementary learners currently face challenges in learning English, which hinders their ability to decode and read from Filipino to English.

As Mercado and Ching (2025) suggested, reading skills are often issues that extend from the first-language to the second-language context due to vocabulary and unfamiliarity with syntax. These findings underscore the urgent need for support to sustain interventions that are evident in reading programs. This early identification of slow, struggling, and non-readers during assessment enabled teachers to design an effective reading program, such as Project Smart, which scaffolds reading skills through a contextual approach, sight words, and repeated exposure. DEPED's literacy framework supports this approach

Pre-Test Result of Filipino Reading Assessment

Reading Level	Learners	Percentage
Fast	30	28.04%
Average	35	32.71%
Slow	29	27.10%
Struggling	9	8.41%
Non-readers	4	3.74%
Total	107	100%

The Filipino Pre-Test table represented the learner's baseline in oral reading performance during the 2024-2025 school year. Only 28.04% or 30 learners were Fast readers, while 32.71% or 35 learners were Average, 27.10% or 29 learners were Slow, 8.41% or 8.41 learners were Struggling, and 3.74% or 4 learners were Non-Readers. This data revealed that a significant percentage of San Guillermo learners in grades 1 to 6 who have undergone the assessment were struggling readers and non-readers. Common literary challenges in the early stages include developing reading fluency and comprehension in the mother tongue.

Moreover, the research reported by the Division of Quezon, Mercado, and Ching (2025) documented that many grade 3 learners demonstrated limited decoding skills, low comprehension, and a lack of motivation to read. This result presents that numerous non-readers in the Filipino pre-test of San Guillermo learners under Project SMART underscores the urgency and relevance of the project interventions.

The results indicate that implementing Project Smart contextualizes reading strategies to bridge gaps in learners' reading skills. According to DepEd (2024), guided reading and repeated oral practices help struggling readers and non-readers progress toward functional reading fluency. This collaborative approach ensures that all stakeholders are part of the solution, fostering a sense of inclusion and shared responsibility.

Post-Test Result of English Reading Assessment

Reading Level	Learners	Percentage
Fast	36	36.64%
Average	30	28.04%
Slow	33	30.84%
Struggling	4	3.73%
Non-readers	1	0.93%
Total	107	100%

This table shows the English post-test results in reading. It is a testament to clear improvement in reading performance. As it was revealed, the proportion of average and fast readers increases significantly; moreover, the number of struggling and non-readers across all Grade levels is decreasing. The English post-test results show a clear improvement across grade levels. The percentage of Fast Readers increased to 36.64% (36 learners), while the percentage of Average Readers increased to 28.04% (30).

Meanwhile, Slow Readers rose to 30.84% (33 learners), and Struggling Readers dropped to 4 learners (3.73%). and 0.93% or one non-reader. This pattern suggests that the demonstration of consistent application of project SMART in San Guillermo Elementary Learners through daily and weekly reading practices and guide questions led to a meaningful literacy growth and advancement among the learners. Rodulfo (2025) expounded that reading strategies and peer discussions enhanced the retention of reading skills.

Astero and Eugenio (2025) added that emphasized reading programs can foster learning motivation, thus improving reading skills. The positive outcomes provide strong empirical evidence that systematic and interactive reading interventions can produce second-language reading proficiency.

Post-Test Result of Filipino Reading Assessment

Reading Level	Learners	Percentage
Fast	40	37.38%
Average	42	39.25%
Slow	19	17.76%
Struggling	3	2.80%
Non-readers	1	0.93%
Total	107	100%

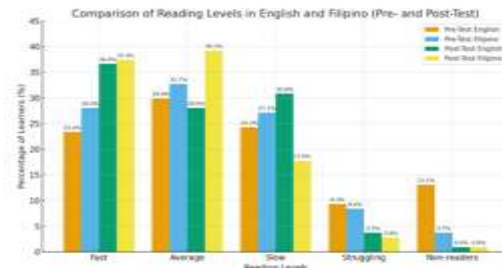
This section outlines the Filipino post-test administered at San Guillermo Elementary School under the SMART project during the 2024-2025 school year. The Filipino post-test also revealed remarkable gains. Fast Readers increased to 40 learners (37.38%), and Average Readers are now 42 learners (39.25%). Correspondingly, Slow Readers decreased and now have 19 learners or 17.76%.

Struggling Readers dropped and are now gaining 2.80% or 3 learners, and there is still a non-reader learner from Filipino. It demonstrates a significant reduction in Non-readers and struggling readers that corresponds to the increase in readers in the Fast and Average categories.

This improvement suggested that interventions implemented through the project SMART were effective in improving fluency. This upward shift revealed the mirrors of the result of Astero and Eugenio (2025). who reported that reading programs significantly improved students' reading skills and confidence. Similarly, Rodulfo (2025) confirmed that this strategy effectively strengthened Grade 3 learners' rereading and summarizing skills.

This reflects the Project SMART's integrated reading drills. The Filipino post-test result, a crucial part of our validation process, concluded that, through a validated program, an evidence-based approach confirms its effectiveness in developing reading proficiency in Filipino, the mother tongue.

Impact of data-driven assessment and strategic instruction used in Project SMART



The comparison between pre-test and post-test results clearly demonstrates the positive impact of Project SMART on learners' reading proficiency. The graph shows how the SMART project's effectiveness impacted the learner through data-driven assessment. In English, the percentage of fast readers increased from 23.4% to 36.6%, while the rate of non-readers dropped from 12%. The number of struggling learners has significantly decreased to four, and the number of non-readers has reduced to one. In Filipino, the number of fast readers rose from 28.0% to 37.4%, while the number of struggling readers decreased from 8.40% to 2.80%, indicating a shift from non-reading to reading among learners. These quantitative results highlight how the project's data-driven assessments enabled teachers to tailor instruction to meet learner needs, while strategic interventions, such as guided reading and peer-assisted learning, enhanced decoding and fluency skills.

According to Astero and Eugenio (2025), peer-assisted reading and systematic fluency exercises significantly improve learners' comprehension and motivation, supporting the observed gains in this study. Likewise, Rodulfo (2025) and Ocangas and Gawahan (2025) emphasized that explicit, teacher-led modeling and ongoing feedback foster consistent progress in reading proficiency—principles reflected in the strategic instruction component of Project SMART. The findings of this study therefore validate that the systematic use of assessment data and targeted instruction directly contributed to learners' reading growth, echoing Dawang et al.'s (2025) argument that data-informed teaching practices reduce reading anxiety and improve comprehension among Filipino pupils.

This measurable improvement confirms that structured, evidence-based interventions can transform reading outcomes in both English and Filipino. The results are consistent with Garcia et al. (2025), who assert that inclusive, science-based literacy instruction produces sustainable reading improvements when implemented through collaborative teacher practices.

Overall, the findings affirmed that Project SMART made a significant impact on learners' reading skills. The notable progress between pre-test and post-test performances substantiates that data-driven assessment and strategic instruction effectively elevated reading proficiency levels among learners at San Guillermo Elementary School, aligning with DepEd's (2024) mandate to strengthen foundational literacy through continuous assessment and evidence-based intervention.

REFERENCES

1. Astrero, M. K., & Eugenio, J. L. (2025). Efficacy of Peer-Assisted Reading Program in Improving Students' Reading Comprehension Level. *Journal of Advanced Research in Education*, 4(3), 1–20. <https://doi.org/10.56397/jare.2025.05.01>
2. Dawang, H. M., Arce, M. T. D., & Franca, G. C. (2025). Reading Anxiety and Comprehension: A Case Study of Intermediate Pupils in A Philippine Elementary School. *Asian Journal of Education and Social Studies*, 51(7), 62–71. <https://doi.org/10.9734/ajess/2025/v51i72101>
3. INSET 2024 – Teacher Development Program in Transforming Access to Classroom Reading Practices | Department of Education. (2024). Deped.gov.ph. https://www.deped.gov.ph/2024/10/24/teacher-development-program-in-transforming-access-to-classroom-reading-practices/?utm_source=chatgpt.com
4. Lou, N., Rebollos, M., & Rebollos, E. (2024). Predictors Affecting Reading Comprehension Of Students: Developing An Intervention Program. *INTERNATIONAL JOURNAL of ADVANCED MULTIDISCIPLINARY STUDIES*, IV. <https://www.ijams-bbp.net/wp-content/uploads/2024/06/5-IJAMS-MAY-2024-121-140.pdf>
5. Mark Vergel Idulog, Gadiano, R., Toledo, E., & Bautista, R. (2023, June 10). Filipino Students' Reading Abilities: A Note on the Challenges and Potential Areas for Improvement. ResearchGate; Yayasan Nurul Yakin Bunga Tanjung. https://www.researchgate.net/publication/371470260_Filipino_Students
6. Mendoza, R., Carl, K., Santos, P., & Garcia, G. (2025). DEPARTMENT OF EDUCATION POLICY BRIEF SERIES Understanding the factors behind (and boosting) basic and functional literacy rates in the Philippines. https://www.deped.gov.ph/wp-content/uploads/PB25-002_-Functional-Literacy_September2025.pdf?utm_source=chatgpt.com
7. Mercado, M., & Ching, G. (2025). Philippine E-Journals | Journals. Ejournals.ph. <https://ejournals.ph/journals.php?letter=g>
8. Ocangas, R. Z., & Gawahan, R. L. (2025, March 21). Teachers' Practices: Its Effects to Students' Reading Skills in Filipino - International Journal of Research and Innovation in Social Science. International Journal of Research and Innovation in Social Science. <https://rsisinternational.org/journals/ijriss/articles/teachers-practices-its-effects-to-students-reading-skills-in-filipino/>
9. Rodulfo, J. (2024). https://www.depedrovcatanduanes.com/files/CY-2025-BERF---Catanduanes---Rodulfo.pdf?utm_source=chatgpt.com
10. V. Garcia, R. G., Mosen, J., & Therese A.P. Bustos, M. (2025). How the science of learning can strengthen inclusive literacy instruction in the Philippines. *International Journal of Developmental Disabilities*, 71(6), 896–918. <https://doi.org/10.1080/20473869.2025.2544158>