



Contextualized Intervention Materials and Reading Performance of Grade 2 Learners

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Abstract - This study examined the effects of contextualized reading intervention materials on the reading performance of Grade 2 learners at Cagamutan Elementary School, Garchitorena District, Division of Camarines Sur, during the 2024–2025 academic year. Specifically, the study aimed to: (1) assess the initial reading performance of learners; (2) describe the design of the contextualized reading materials; (3) determine the curricular validity of the materials; (4) evaluate learners' reading performance after implementation; (5) analyze the significance of changes in reading performance; and (6) measure the extent of the materials' impact. A descriptive-comparative-correlational research design was employed. Data were collected through a teacher-made reading test administered to 30 learners and a curricular evaluation checklist completed by five expert validators. Quantitative data were analyzed using mean, standard deviation, proficiency levels, t-tests, and Cohen's *d*. Findings revealed an initial reading performance of 41.27%, indicating a need for targeted intervention. The contextualized materials were rated highly valid ($M = 4.00$) and demonstrated positive effects on reading engagement and comprehension. Post-intervention performance improved to 77.4%. Statistically significant gains were observed in decoding ($t = -5.58$), fluency ($t = -7.12$), and vocabulary ($t = -9.87$), all with *p*-values of 0.000. Effect sizes were large across all domains (Cohen's $d = 3.22, 2.69, \text{ and } 4.42$), confirming substantial improvements. The study concludes that contextualized reading interventions are highly effective in enhancing early-grade literacy, particularly in decoding, fluency, and vocabulary development.

Keywords - Contextualized Intervention Material, Reading Performance, Grade 2 Learners

INTRODUCTION

The development of contextualized intervention materials is imperative in addressing the unique challenges experienced by Grade 2 learners in Philippine public schools, particularly those situated in rural areas. These challenges include a lack of adequate resources, limited access to age-appropriate reading materials, varying teacher capacities, and socio-economic disparities. Furthermore, language diversity and differing home literacy environments contribute significantly to low reading proficiency. Enhancing learners' reading performance, therefore, requires materials that acknowledge their linguistic backgrounds and actively engage families in literacy development. Effective interventions should adopt a comprehensive approach—integrating curricular

reforms, instructional strategies, and community-based literacy programs.

Reading performance is shaped not only by cognitive and instructional factors but also by psychosocial elements such as self-esteem, learner motivation, and community support. Fostering literacy skills requires holistic efforts that go beyond textbooks and classroom routines to empower learners within their lived contexts. By cultivating positive learner self-concepts, achievement aspirations, and a supportive environment, educators can significantly improve literacy outcomes.

This imperative is echoed in international and regional benchmarks. The *Southeast Asia Primary*

Learning Metrics (SEA-PLM, 2019) revealed that many children across six Southeast Asian countries did not meet the expected minimum proficiency in reading. The report further explored the profile of low-performing readers and the systemic support they receive, emphasizing the value of academic resilience—children achieving despite disadvantage—as a basis for policy reform.

This study supports the United Nations' *Sustainable Development Goal 4* (UN, 2015), which seeks to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.” Specifically, it addresses Target 4.1: “By 2030, ensure that all girls and boys complete free, equitable, and quality primary and secondary education leading to relevant and effective learning outcomes.”

Empirical studies reinforce the efficacy of reading interventions. Gersten et al. (2017) demonstrated that structured reading interventions, particularly those emphasizing decoding and fluency, yielded positive effects on learners' reading performance. Notably, these programs were most effective when they included sustained teacher support. Similarly, Response to Intervention (RTI) models, composed of multi-tiered levels of instructional support, have shown promise in preventing reading failure by providing increasingly intensive instruction as needed (Balu et al., 2015). However, findings also caution against overgeneralization; national evaluations revealed that not all RTI implementations yield uniform success, especially when interventions are poorly matched to student needs.

In the Philippine context, the Department of Education (DepEd) responded with its flagship initiative, the *Every Child a Reader Program*, designed to develop reading proficiency in English and Filipino. This commitment was further solidified through *DepEd Order No. 173, s. 2019*, titled *HAMON: BAWAT BATA BUMABASA (3Bs Initiative)*, which affirms that:

“To make every learner a proficient reader, schools across the country are tasked to help learners develop their reading skills. Moreover, there is a need to strengthen the reading proficiency of every learner and to nurture a culture of reading which is a requisite in all content areas.”

In support of this mandate, the *5Bs* campaign—*Bawat Batang Bicolano Bihasang Bumasa*—was launched under *DepEd V-Regional Memorandum No. 157, s. 2019*. This regional initiative, championed by Regional Director Gilbert Sadsad, aims to strengthen reading and writing skills among Bicolano learners, develop contextualized reading interventions, and ensure localized implementation of literacy programs.

Guided by these legal, empirical, and pedagogical foundations, this study was conceptualized to address the reading challenges faced by Grade 2 learners at Cagamutan Elementary School in the Garchitorena District. It explored learners' psychosocial experiences within their homes, classrooms, and communities that may contribute to low reading performance. In doing so, it posits that effective literacy interventions must extend beyond standardized approaches. Instead, localized, contextualized, and school-community-based programs are essential for promoting literacy, social connectedness, and learner motivation. Ultimately, a nuanced understanding of learners' contexts enables more targeted interventions that lead to improved reading outcomes and equity in education.

OBJECTIVES OF THE STUDY

This study aimed to determine the effects of contextualized reading intervention materials on the reading performance of Grade 2 learners at Cagamutan Elementary School, Garchitorena District, Division of Camarines Sur, during the 2024–2025 school year. It sought to assess the learners' initial reading skills in decoding, fluency, and vocabulary.

The study also aimed to develop contextualized intervention materials focused on learning outcomes, content, activities, and assessments tailored to the learners' needs. Additionally, it evaluated the curricular validity of these materials in terms of face, content, and construct validity.

A further objective was to measure the learners' reading performance after using the intervention materials and to determine if there was a significant improvement compared to their performance before the intervention. Lastly, the study sought to quantify the overall impact of the intervention on the learners' reading proficiency.

METHODS

This study employed a descriptive-comparative research design. The descriptive method was utilized to assess the reading performance of Grade 2 learners at Cagamutan Elementary School in terms of decoding, fluency, and vocabulary, as well as to present the design and curricular validity of the contextualized reading intervention materials across learning outcomes, content, activities, and assessments. The comparative method determined significant differences in reading performance before and after the intervention and measured its overall effects. Thirty Grade 2 learners participated in the study, with no sampling employed since all were included. Selected master teachers validated the curricular aspects of the intervention materials.

Data were gathered using a teacher-made test, developed in alignment with the Philippine Informal Reading Inventory (Phil-IRI, 2018), which incorporated pre-test and post-test assessments covering decoding, fluency, and vocabulary. The test underwent expert validation, item analysis, and reliability and validity checks to ensure quality and consistency. An evaluation checklist was used by experts to assess curricular validity in terms of face, content, and construct.

The researcher followed systematic procedures including conceptualization, approval, permit acquisition, instrument preparation, validation, dry-run, administration, data retrieval, processing, and writing. Statistical analyses involved means to compare pre- and post-test scores, standard deviation to assess score variability, performance level classification, weighted mean to evaluate curricular validity, dependent-sample t-tests to identify significant differences, and Cohen’s D to quantify effect size, providing robust and comprehensive insights into the intervention’s impact on learners’ reading proficiency.

RESULTS AND DISCUSSION

Baseline assessment of Grade 2 learners’ reading performance showed consistently low scores in decoding, fluency, and vocabulary, all falling under the “Did Not Meet Expectations” (DNME) category.

Table 1. Summary of Reading Performance of Grade 2 Learners (Pre-Test)

Component	No. of	Mean Score	Standard Deviation	Performance Level (%)	Interpretation
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Items					
Decoding	30	13.66	2.50	45.53	Did Not Meet Expectations (DNME)
Fluency	30	10.28	3.04	34.27	Did Not Meet Expectations (DNME)
Vocabulary	30	13.20	1.68	44.00	Did Not Meet Expectations (DNME)

In decoding, learners had a mean score of 13.66 (SD = 2.50), translating to a performance level of 45.53%. Fluency was lower, with a mean of 10.28 (SD = 3.04) and a performance level of 34.27%, indicating challenges in reading speed and accuracy. Vocabulary scores were similarly weak, with a mean of 13.2 (SD = 1.68) and a performance level of 44%. These results underscore a pressing need for targeted intervention to support foundational reading skills among early grade learners.

The contextualized reading intervention material was developed to enhance the reading performance of Grade 2 learners through a holistic, culturally responsive approach. Its design centered on four core dimensions: learning outcomes, learning content, learning activities, and learning assessment. Each dimension addresses essential aspects of early reading development.

Learning Outcomes. The material targeted key reading domains: decoding, vocabulary, and fluency. Decoding enables learners to recognize and pronounce words accurately, forming the foundation of reading proficiency. Vocabulary development was designed to deepen word knowledge through engaging and contextually relevant texts. Fluency was addressed through strategies that promote speed, accuracy, and expression, thus enhancing overall reading comprehension and enjoyment. These outcomes collectively aim to strengthen foundational literacy, which is critical for broader academic success.

Learning Content. The reading materials were designed with cultural relevance and learner relatability in mind. Stories such as *The Brave Little Carabao* and *The Magic Mango Tree* draw from local folklore, values, and environments, making reading meaningful and engaging. Environmental themes, such as those in *The Lost Kite*, help learners connect reading with real-life surroundings. Interactive elements (e.g., puzzles, questions) were embedded to foster critical thinking and engagement. Such contextualization not only increases motivation but

also supports better comprehension and vocabulary acquisition.

Learning Activities. A range of interactive and structured activities was integrated to support skill development. Guided reading sessions targeted reading accuracy and comprehension. Story mapping and role-playing encouraged active engagement and narrative understanding. Vocabulary games and phonics activities developed word recognition and phonological awareness. Discussion circles and reading journals promoted reflective thinking and language expression. These activities were strategically aligned with learners' developmental levels and cultural experiences to make literacy acquisition more effective and enjoyable.

Learning Assessment. Assessment strategies were both formative and summative, ensuring ongoing and comprehensive evaluation. Formative tools such as reading logs, peer assessments, and quizzes provided real-time feedback. Summative assessments—standardized tests and end-unit evaluations—measured overall progress. These assessments were designed to be age-appropriate and engaging, incorporating visual and interactive components. Data from assessments allowed teachers to monitor learning trajectories, adjust instruction, and deliver targeted interventions. This dynamic, data-driven approach fosters continuous improvement and ensures that all learners are supported equitably.

The design of the contextualized reading intervention material reflects an integrative pedagogical framework responsive to learners' cognitive, cultural, and emotional needs. By grounding reading instruction in familiar contexts and actively engaging learners, the material promotes not just skill acquisition but also motivation and identity formation. Moreover, its assessment-driven approach empowers teachers to tailor instruction, thereby maximizing learning gains and minimizing reading difficulties.

The curricular validity of the contextualized reading intervention material was evaluated in terms of face, construct, and content validity. As shown in Table 2d, all three domains received a perfect mean score of 4.00, interpreted as "Highly Valid."

Table 2. Summary of Curricular Validity of Contextualized Reading Intervention Materials

Validity	AWM	Interpretation	Rank
Face Validity	4.00	Highly Valid	1
Construct Validity	4.00	Highly Valid	1
Content Validity	4.00	Highly Valid	1
Overall Weighted Mean	4.00	Highly Valid	

These results indicate that the material is visually appropriate (face validity), aligned with intended reading constructs (construct validity), and sufficiently comprehensive in addressing Grade 2 reading competencies (content validity). The consistent rating of "Highly Valid" across all categories confirms the material's curricular soundness and suitability for classroom use.

The study assessed the post-intervention reading performance of Grade 2 learners across three domains: decoding, fluency, and vocabulary. The findings are presented in Table 3.

Post-intervention results show a modest improvement in decoding, with a performance level of 75.50 interpreted as *Fairly Satisfactory*, indicating enhanced word recognition and pronunciation skills. However, both fluency (63.59) and vocabulary (73.13) remained in the *Did Not Meet Expectations* range, suggesting that while the intervention had some effect, further reinforcement is needed, particularly in developing automaticity in reading and enriching word knowledge.

These outcomes imply that the contextualized materials were partially effective in supporting reading development. The notable gain in decoding may be attributed to the culturally familiar content and structured phonics activities. Nonetheless, fluency and vocabulary require sustained exposure, repeated reading, and more explicit instructional support to yield substantial gains.

Table 3. Level of Reading Performance of Grade 2 Learners After Using the Contextualized Reading Intervention Materials

Reading Skill	N	Mean	SD	Performance Level	Interpretation
Decoding	32	24.16	3.86	75.50	Fairly Satisfactory (FS)

Fluency	3 2	20.35	4.2 3	63.59	Did Not Meet Expectati ons (DNME)
Vocabular y	3 0	23.40	2.7 9	73.13	Did Not Meet Expectati ons (DNME)

Reading performance is a foundational aspect of learners’ academic development. Table 4 presents the statistical comparison of learners’ reading performance before and after the implementation of contextualized reading intervention materials, focusing on three key domains: decoding, fluency, and vocabulary.

The results show statistically significant improvements in all three reading domains. The negative t-values for decoding (t = -5.58), fluency (t = -7.12), and vocabulary (t = -9.87), along with corresponding p-values of < 0.001, indicate substantial gains in post-test scores following the intervention.

Table 4. Differences in the Level of Reading Performance Before and After Using Contextualized Reading Intervention Materials

Reading Skills	t-test value	p-value	Interpretation
Decoding	-5.58	0.000	Significant
Fluency	-7.12	0.000	Significant
Vocabulary	-9.87	0.000	Significant

These findings suggest that the use of contextualized reading materials—tailored to learners’ cultural and linguistic experiences—contributed meaningfully to the development of foundational reading skills. The contextualized approach likely enhanced learner engagement and comprehension, making reading tasks more relatable and accessible.

The statistically significant improvements reinforce the pedagogical value of contextualized materials in early literacy instruction. They offer compelling evidence that embedding local culture and context into instructional design can promote deeper

learning, particularly in early grade learners. Accordingly, teachers and curriculum developers are encouraged to integrate such approaches in reading instruction to optimize educational outcomes.

Table 5 presents the effect sizes of the contextualized reading intervention materials on decoding, fluency, and vocabulary. All three skills show large effects, with Cohen’s d values of 0.85, 0.80, and 0.91, respectively.

Table 5. Effects of the Contextualized Reading Intervention Materials

Reading Skills	Cohen’s d	Effect Size	Interpretation
Decoding	3.22	0.85	Large
Fluency	2.69	0.80	Large
Vocabulary	4.42	0.91	Large

The consistently large effect sizes confirm that the intervention had a strong positive impact across all areas of reading. The contextualization likely enhanced learners’ engagement and comprehension by aligning content with their experiences and language. This reinforces the value of culturally relevant pedagogy in improving early literacy outcomes and suggests that such materials are an effective tool for foundational reading instruction.

CONCLUSIONS AND RECOMMENDATIONS

The reading performance of Grade 2 learners in decoding, fluency, and vocabulary was initially below expectations, highlighting a clear need for targeted instructional support. The contextualized reading intervention materials developed for this study were well-designed, effectively enhancing learners’ engagement, comprehension, and overall literacy skills. These materials also demonstrated strong curricular validity, receiving high ratings in face, content, and construct validity, which affirms their suitability for the intended learning outcomes.

After the intervention, learners showed notable improvement, achieving a fairly satisfactory level in decoding but still falling short of expectations in fluency and vocabulary. Statistical analysis confirmed that these improvements in decoding, fluency, and vocabulary were significant, as indicated by the t-test

results and p-values. Furthermore, the effect size calculations revealed a large positive impact of the intervention materials on the reading performance of Grade 2 learners, emphasizing the effectiveness of the contextualized approach.

To address the initial low reading performance, targeted interventions such as phonics-based decoding programs, structured fluency exercises, and explicit vocabulary instruction should be implemented. Parental involvement in supporting reading at home should be encouraged, and reading activities should be adapted to cater to the diverse needs of learners. Additionally, teachers should receive ongoing professional development focused on effective reading strategies to better support learners.

The intervention materials can be further enhanced by integrating digital tools and interactive platforms that create engaging and accessible learning experiences. Incorporating real-world connections through projects and activities, along with group work and peer learning, can foster deeper comprehension and motivation. Regular feedback mechanisms should be established to help learners track their progress and identify areas for improvement.

To maintain curricular relevance, visuals should be refined to include high-quality, culturally familiar images, and content should be closely aligned with the learners' local context. Learning activities should be carefully sequenced from foundational reading skills to more complex critical thinking tasks to maximize learner engagement and skill development.

To sustain and improve reading gains, the materials should incorporate more targeted fluency and vocabulary exercises that are engaging and contextually appropriate. Regular formative assessments are essential to monitor learner progress and guide differentiated instruction. Ongoing teacher training should be prioritized to ensure effective delivery and adaptation of the materials.

Finally, it is recommended to continue refining and expanding the contextualized reading intervention materials by incorporating diverse, learner-centered activities and regularly updating content to keep it relevant and stimulating. Sustained professional development for teachers and consistent monitoring of learner progress will help maintain and build on the

significant improvements achieved through this intervention.

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