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Culturally Responsive Workbook for Key Stage 1 (KS1) Emergent Readers

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Abstract

This study developed, validated, and examined the effectiveness of a culturally responsive workbook for Key Stage 1 emergent readers at Dugyaman Elementary School, Division of Butuan City. The CRLA results were used to identify the learners' specific literacy difficulties and priority skills for intervention. These identified needs served as the basis for selecting the three least-learned competencies addressed in the workbook under phonics and word study competencies in Reading and Literacy 1, Term 1: producing target L1 letter sounds, identifying L1 letters, and isolating initial and final sounds in words. A developmental-evaluative research design was used with 22 purposively selected emergent readers and five expert evaluators. Data were gathered through the Department of Education's Comprehensive Rapid Literacy Assessment (CRLA) and an adapted Learning Resources Management and Development System (LRMDS) evaluation tool. The pretest showed that all participants were emergent readers, with 90.91% classified under Full Refresher and 9.09% under Moderate Refresher. Expert evaluation rated the workbook very satisfactory in Content Quality (WM = 3.97), Format (WM = 3.99), Presentation and Organization (WM = 4.00), and Accuracy and Up-to-dateness (WM = 4.00). After implementation, 54.54% of the learners reached the Grade Ready level, while 45.46% reached the Light Refresher level. The paired-samples t-test showed a significant difference between the pretest and posttest scores (t -value = -8.922, df = 21, p -value = .000). Based on the findings, the workbook was further enhanced in content and format, including realia-based illustrations to strengthen its cultural and contextual relevance.

Keywords: Comprehensive Rapid Literacy Assessment, Culturally Responsive Workbook, Early Reading Literacy, Emergent Readers, MTB-MLE

Introduction

Early reading literacy is a fundamental skill that supports children's cognitive development and academic success. Educational systems worldwide emphasize the importance of developing foundational literacy skills—such as phonemic awareness, decoding, vocabulary, and comprehension—in the early years of schooling. These competencies enable learners to understand written language and access knowledge across

subject areas. Studies indicate that learners who fail to acquire basic reading skills in the early grades often experience continuing academic difficulties in later schooling (Gillon et al., 2024).

Despite global efforts to strengthen literacy instruction, many children still struggle with reading during the early years of formal education. International literacy studies revealed that a considerable number of learners reach later primary grades without mastering essential reading skills. Early reading difficulties are often linked to limited exposure to print, inadequate learning materials, and insufficient instructional support. When these challenges remain unresolved, learners may develop low confidence and reduced motivation toward reading (Kim et al., 2023).

One effective approach to improving early literacy outcomes is the use of structured, progressive instructional materials. Reading workbooks provided opportunities for guided practice, reinforcement of reading skills, and independent learning among early-grade learners. These materials systematically guided beginning readers through a series of tasks that build competencies, ranging from letter recognition to word decoding and comprehension. Research showed that structured reading materials significantly improved learners' reading fluency and comprehension when used consistently in instruction (Suggate et al., 2022).

Another critical dimension of effective literacy instruction is the contextualization of learning resources. Culturally responsive materials incorporated learners' cultural backgrounds, native languages, and real-life experiences into learning activities. This approach helps learners connect new knowledge with familiar contexts, making reading more meaningful and engaging. Studies have shown that contextualized materials enhance learners' comprehension and overall literacy development (Luceñara, 2023).

In the Philippine educational context, improving early reading literacy remained a significant concern due to persistent learning gaps among elementary learners. National assessments indicated that many pupils in the early grades struggled with basic reading skills, including letter recognition, decoding, and comprehension. The Department of Education has implemented several programs to strengthen reading instruction and remediation; however, limited access to appropriate and contextualized instructional materials continued to hinder the effectiveness of literacy instruction in some schools (DepEd, 2023).

Several studies in the Philippines have highlighted the effectiveness of culturally responsive instructional materials in improving learners' reading performance. These materials allow teachers to present lessons using familiar stories, cultural references, and local experiences that learners can easily relate to. As a result, learners became more motivated and engaged in reading tasks. Empirical evidence suggested that culturally responsive reading materials significantly improved learners' reading performance when used as instructional interventions (Pimentel, 2025).

In the local context of the Butuan City Division, schools continued to implement initiatives to improve early literacy among Key Stage 1 learners. However, some pupils still struggle to develop foundational reading skills, particularly those identified as emergent readers. Teachers often relied on limited instructional resources to address learners' diverse literacy needs, highlighting the need for culturally responsive materials that support struggling readers.

Specifically, at Dugyaman Elementary School, the Comprehensive Rapid Literacy Assessment (CRLA) Report for School Year (SY) 2025–2026 revealed that a notable proportion of Key Stage 1 learners were identified as emergent readers. Out of 22 emergent readers two were in Grade 1, eight were in Grade 2, and 12 were in Grade 3. These learners demonstrated severe difficulties in letter-sound recognition, phonemic awareness, and decoding, preventing them from recognizing familiar words automatically or reading simple sentences. These baseline data underscored the urgent need for structured interventions targeting letter recognition, sound isolation, and basic decoding to advance learners toward grade-level reading proficiency. To address these challenges, this study developed a culturally responsive literacy workbook tailored specifically for Key Stage 1 emergent readers. The workbook focused on strengthening letter and sound recognition, phonological awareness, and decoding, enabling learners to recognize familiar words

automatically through culturally relevant content and structured activities. By situating reading activities within the learners' environment and everyday experiences, the workbook sought to improve the early reading literacy of Key Stage 1 emergent readers.

Review of Related Studies

This chapter presents the reviews of related literature and studies that provide theoretical and empirical foundations for understanding early reading development, literacy interventions, and the use of contextualized instructional materials in basic education.

Early reading literacy is a foundational component of basic education, emphasizing the acquisition of decoding, comprehension, vocabulary, and fluency skills. Instructional workbooks serve as structured tools designed to guide learners through sequential exercises, provide reinforcement, and support independent practice. Contextualized workbooks extend these benefits by integrating learners' cultural experiences, local environments, and real-life contexts into instructional content. This approach is supported by constructivist learning theory, which suggests that learners construct knowledge more effectively when new information is connected to familiar contexts and prior experiences (Goodman et al., 2023). By aligning learning tasks with learners' lived experiences, contextualized workbooks promote meaningful engagement, comprehension, and skill development in early literacy.

Several recent studies illustrate the development of contextualized reading materials akin to workbooks. Macatigue and Liquido (2025) conducted a study on Grade 3 learners in Agusan del Norte, Philippines, using a descriptive-developmental design. The researchers identified learners' least learned competencies and designed exercises embedded in local contexts. Expert reviewers evaluated the materials as very satisfactory in content quality and instructional effectiveness, demonstrating that systematically developed, context-relevant resources can function as effective tools for guided literacy practice.

Similarly, Santuya (2025) developed and validated contextualized reading comprehension materials for Grade 3 learners, incorporating real-world examples and culturally familiar content. The study reported significant improvements in learners' reading comprehension levels, highlighting the effectiveness of materials that integrate learners' experiences into structured reading exercises. These findings support the idea that contextualized resources, whether labeled as workbooks or reading materials, guide learners through progressively challenging tasks while maintaining alignment with their social and cultural realities.

In addition, Aclin (2025) examined the development of contextualized reading materials for multigrade classrooms in the Philippines. The study produced print resources tailored to learners' cultural and linguistic contexts. Expert validation confirmed high levels of content accuracy, organization, and relevance. Although the study focused on multigrade learners rather than early grades, its systematic development process mirrors best practices in creating contextualized workbooks that scaffold literacy instruction and ensure progressive skill acquisition.

Complementing these studies, Sambayon et al. (2023) explored the effectiveness of contextualized learning materials in improving reading skills and comprehension. Although the materials were not formatted as workbooks, they were structured and culturally relevant. Students who used these resources demonstrated significantly better comprehension outcomes compared to peers using conventional texts. The study reinforces the pedagogical rationale for designing structured, contextually aligned workbooks to enhance early reading literacy.

Collectively, these studies emphasized that the systematic development of contextualized workbooks or reading materials through needs assessment, alignment with learners' cultural context, and expert validation supported early reading literacy. Contextually relevant workbooks provided structured, meaningful

practice that not only improved reading skills but also increased learner engagement and motivation, making them effective tools for foundational literacy development.

Workbook development for early literacy entails a systematic process of designing instructional materials that support young learners in acquiring foundational reading skills such as alphabet knowledge, phonological awareness, print awareness, and vocabulary, Belarde et al. (2021). Instructional workbooks served as structured resources that presented sequenced exercises and activities so children can progressively engage with core literacy competencies and built confidence in early reading tasks. Research on instructional material creation emphasized that development should begin with a needs assessment to identify relevant literacy domains before designing, validating, and refining workbook content in alignment with curriculum standards and learner needs, Fauziah et al. (2025).

A concrete example of workbook development for early literacy is the study of Belarde et al. (2021) focused on developing a reading workbook for kindergarten learners. Using a developmental research approach, the researchers gathered information from kindergarten teachers to identify the literacy areas that needed to be included in the material. The study identified five important areas: visual perception and discrimination, alphabet knowledge, phonological awareness, book and print awareness, and vocabulary development. Based on these identified needs, appropriate activities were developed and included in the workbook. The study also found that the workbook could be used throughout the school year to provide continuous support for learners as they developed their early reading skills. These findings show the importance of using learners identified literacy needs as a basis for developing appropriate and useful reading materials.

Moreover, studies on the development of reading materials have shown the importance of providing learners with structured and appropriate resources to support their reading development. Research on instructional materials also found that materials developed through a systematic process and reviewed by experts can help address learners' reading needs. When these materials are tried out and evaluated, they can provide useful support in improving learners' reading skills. Although not exclusively formatted as traditional workbooks, projects such as those by Fauziah, Fauziah, and Dzulkurnain (2025) illustrate how instructional materials developed with similar processes comprising needs assessment, expert evaluation, and student trial can enhance reading skills among elementary learners. Their research on lesson study-based instructional material development for reading showed that materials supported by teacher collaboration and iterative refinement were effective in improving reading proficiency and were perceived positively by educators.

The importance of structured and well-designed materials in early literacy is further supported in studies that examined classroom resources and teacher practices. For example, Kılınççı and Bayraktar (2021) observed that insufficient literacy materials and traditional worksheets limit teachers' capacity to support emergent literacy skills, suggesting that development of quality instructional materials—such as workbooks—is essential for stimulating early literacy development in preschool contexts. This research highlights the need for materials that are not only present but pedagogically responsive to literacy needs, a principle that undergirds successful workbook development.

Additionally, studies focused on early literacy interventions emphasized the role of tailored instructional resources. Although focused on digital and e-learning formats, research on early reading instructional tools demonstrated that materials designed with explicit phonics, sound recognition, and contextually relevant tasks can effectively support early reading development. This trend underscores a broader consensus that instructional material development—whether analog workbooks or digital resources—should be grounded in literacy science and aligned with learners' developmental stages to maximize impact (Semilla et al., 2023).

The reviewed literature indicated that workbook development for early literacy was most effective when guided by systematic processes that include needs assessment, curriculum alignment, expert validation,

and iterative refinement. Empirical studies revealed that workbooks and other structured instructional materials developed through these rigorous steps not only support foundational reading skill acquisition but also respond to classroom realities and enhance learner engagement. These findings affirm the educational value of thoughtfully developed early literacy workbooks as tools for fostering foundational reading competencies among young learners.

Phonics and word study represent foundational instructional approaches in early literacy, focusing on the systematic teaching of letter-sound relationships and the exploration of word patterns, spelling, and meaning. These approaches are grounded in the understanding that skilled reading ultimately depends on the ability to decode and recognize words automatically. Ehri (2020) explained that beginning readers learn to read words either by decoding letters into blended sounds or by predicting words from context, but that the pathway contributing most to comprehension is reading words automatically from memory by sight, which develops when graphemes are connected to phonemes. This theoretical foundation reinforces the value of systematic phonics instruction as a means of helping emergent readers build a reliable, sound-based system for recognizing and decoding unfamiliar words rather than relying solely on guesswork or memorization.

Empirical evidence from local classroom-based studies supports the effectiveness of structured phonics instruction in improving beginning reading performance. Bandala (2024) evaluated the effectiveness of phonics instruction in the beginning reading performance of Grades 1 and 2 pupils in Ormoc City Division using a quasi-experimental pre-test and post-test design with the Early Grade Reading Assessment as the primary tool. The study found that the proper articulation of letter sounds, an appropriate strategy for blending sounds into words, and the use of varied and differentiated learning materials contributed to a significant improvement in pupils' reading performance, confirming phonics instruction as an effective intervention for beginning readers. This finding underscores that when phonics is taught explicitly and supported by appropriately contextualized materials, even struggling emergent readers can demonstrate marked gains in decoding ability within a relatively short intervention period.

Complementing the focus on phonics, word study extends learners' engagement with words beyond sound-letter correspondence into pattern recognition, spelling, and vocabulary development. Lerongan (2025) examined the efficacy of the Word Study Strategy in improving the spelling skills of Grade 7 students in Bukidnon, Philippines, through a quasi-experimental design comparing a group exposed to word sorting and pattern recognition activities against a group receiving traditional rote-memorization-based spelling instruction. Results showed that only the group exposed to the Word Study Strategy demonstrated significant improvement, moving from a "Did Not Meet Expectation" level to a "Very Satisfactory" rating, underscoring the strategy's effectiveness in fostering long-term retention and deeper understanding of spelling patterns compared to rote memorization. Although conducted with older learners, this study illustrates a principle directly relevant to Key Stage 1 emergent readers: that structured, pattern-based exploration of words builds more durable literacy skills than memorization-driven approaches.

Supporting this integrated view of phonics and word knowledge, Ganske (2021) emphasized that word study activities, such as word sorting and morphological analysis, can significantly improve spelling and vocabulary acquisition, particularly among struggling readers. Collectively, these studies affirm that phonics and word study are complementary and evidence-based components of early literacy instruction. They support the conceptual basis of the present study, which incorporated phonics and word-based activities into a culturally responsive workbook designed to strengthen the decoding, spelling, and word-recognition skills of Key Stage 1 emergent readers.

The literature on instructional material development consistently underlines that expert evaluation is an essential prerequisite before any reading resource enters the classroom. In the Philippine educational context, this evaluation process is systematically governed by the Department of Education's Learning Resource Management and Development System (LRMDS) framework, which evaluates learning materials

across four core domains: content, format, presentation and organization, and accuracy and up-to-dateness of information. Recent empirical studies on culturally responsive and contextualized reading materials provide strong evidence for the necessity of evaluating resources through this four-domain framework.

The evaluation process begins with the Content Domain, which evaluates whether a material's subject matter aligns with targeted competencies, suits the learners' developmental stage, and authentically reflects their cultural context. Research shows that evaluating content against familiar cultural frameworks yields significant learning gains. For instance, Ligoyligoy et al. (2025) demonstrated that contextualized, phonics-based decodable workbooks evaluated and tailored to the linguistic and cultural background of Indigenous Peoples (IP) learners in Sarangani produced statistically significant improvements in reading performance. Similarly, Aclin (2025) established that evaluating reading materials contextualized to reflect multigrade English learners' local environment and daily experiences earned a "Very Satisfactory" rating ($M = 4.32$) from content experts. This evaluation of culture-curriculum alignment was further corroborated by Narag (2026), whose culturally grounded self-learning module integrating the *Panag-Tadug* wedding custom of the Isnag-Ymandaya subtribe achieved an "Outstanding" evaluation score on DepEd LRMS content standards while simultaneously boosting students' cultural pride.

Crucial to the delivery of this content is the Format Domain, which focuses on the evaluation of visual layout, typographic legibility, illustration quality, and overall aesthetic appeal. Rather than serving purely aesthetic functions, visual format evaluation directly impacts cognitive processing and readability. Macatigue and Liquido (2025) highlighted this in their evaluation of digitalized reading resources for Grade 3 learners, where expert evaluators awarded a "Very Satisfactory" rating for technical and interface design suited to primary-grade readers. In a similar vein, Narag (2026) noted that an "Outstanding" design evaluation correlated with high student acceptability, proving that intuitive visual arrangements make indigenous cultural concepts far more accessible. These empirical findings reflect the broader theoretical work of Adler (2021), whose evaluation of text design established that structural design elements—such as spatial layout, line spacing, and font selection—fundamentally dictate how effectively readers process and comprehend written text.

Beyond physical appearance, the Presentation and Organization Domain evaluates how logically information flows and whether activities are appropriately scaffolded to support progressive learning. Well-structured materials maintain engagement and prevent cognitive overload. In Aclin's (2025) evaluation, presentation and organization emerged as the highest-rated domain ($M = 4.85$), with evaluators emphasizing that a clear, sequential progression of culturally themed activities directly enhanced reading comprehension. Narag (2026) achieved similar success by utilizing focus group evaluations to identify and resolve systemic issues like lesson disconnection prior to structuring the final material. As Adler (2021) observed, the evaluation of coherent organization and clear structural hierarchy captures learner interest and sustains focus throughout an intervention, ultimately reinforcing both comprehension and academic motivation.

Finally, the Accuracy and Up-to-Dateness Domain centers on the evaluation of the factual, grammatical, and cultural integrity of the learning resource. Erroneous information or linguistic mistakes severely undermine instructional efficacy. Demonstrating this standard, Aclin (2025) reported that contextualized reading materials achieved their top score in the evaluation of factual and grammatical accuracy ($M = 4.88$). Likewise, Macatigue and Liquido (2025) utilized rigorous expert evaluation to eliminate conceptual, typographical, and grammatical errors before classroom dissemination. The practical impact of this accuracy evaluation was directly linked to student outcomes by Ligoyligoy et al. (2025), who observed that culturally authentic materials evaluated to be free of conceptual errors directly drove measurable increases in reading accuracy and oral fluency among underrepresented emergent readers.

Synthesizing these empirical contributions reveals a clear consensus: rigorous expert evaluation across content, format, presentation and organization, and accuracy is vital to creating effective, culturally

responsive learning resources. This established four-domain literature directly informs and justifies the evaluation methodology applied to the culturally responsive workbook in the present study.

The implementation of instructional workbooks as part of early literacy interventions has gained attention in education research, particularly for young learners who enter formal schooling without mastery of foundational reading skills. Workbooks—structured collections of exercises and guided reading tasks—are commonly used in early grades to develop letter knowledge, phonemic awareness, decoding skills, and basic word recognition. For emergent readers in Key Stage 1 (typically ages 5–7), these materials are designed to provide systematic practice that addresses gaps in early decoding and reading competence, with the ultimate goal of transitioning learners toward independent reading.

Empirical evidence from the Philippines provided concrete examples of workbook implementation for emergent literacy. Utang and Merino (2025) investigated the effect of a workbook titled “Mga Pagsasanay sa Pagkatutong Bumasa” on kindergarten learners’ foundational reading skills during the 2022–2023 school year. Using a one-group pretest–posttest design with 18 learners, the study reported significant improvements in letter name knowledge, letter sound knowledge, syllable recognition, and word recognition after workbook implementation. These findings suggested that the structured exercises in the workbook facilitated measurable gains in early reading performance among children initially classified as emergent readers, highlighting the practical impact of targeted workbook use in early literacy instruction.

In a related study, Dela Roca (2025) examined the development and implementation of localized reading materials for Key Stage 1 and 2 learners aimed at improving comprehension levels. Although not explicitly formatted as a workbook, the study involved sequenced reading tasks integrated into classroom practice that function similarly to workbooks. The research emphasized that effective implementation of such reading resources requires teacher facilitation, alignment with curriculum expectations, and consideration of contextual barriers, such as access to quality printed materials and available instructional time. The study’s findings underscore the broader considerations necessary when deploying reading workbooks for emergent readers, including the importance of teacher readiness and resource accessibility.

Generally, these studies indicated that workbook implementation for Key Stage 1 emergent readers, while still under-researched, is closely tied to broader early literacy intervention practices. Structured workbook use can positively influence early reading outcomes when materials are purposefully designed, aligned with literacy competencies, and implemented under effective teacher guidance. Furthermore, successful implementation depends on several contextual factors, including teacher preparedness, curriculum alignment, and the availability of resources. Future research focusing specifically on classroom implementation of reading workbooks for emergent readers in key stage 1 would provide valuable insights into best practices, fidelity of use, and the sustainability of literacy gains.

Reading assessment is essential for early literacy instruction, serving as both a diagnostic and progress-monitoring tool that guides educators in identifying learners’ strengths, weaknesses, and instructional needs. In early primary grades, accurate reading assessment enabled teachers to make data-driven decisions that support targeted intervention, particularly for learners at risk of falling behind in foundational skills such as letter recognition, phonemic awareness, decoding, fluency, and comprehension. Among various assessment tools, the Comprehensive Rapid Literacy Assessment (CRLA) has emerged as a widely used instrument in the Philippine basic education context, designed to quickly evaluate early reading proficiency and to inform instructional strategies for Key Stage 1 learners.

The CRLA was initially conceptualized as a rapid, curriculum-linked literacy assessment for Grades 1 to 3 that can be administered at multiple points during the school year to identify reading levels and determine appropriate support categories for learners (e.g., Grade Ready, Light Refresher, Moderate Refresher, Full Refresher) based on their performance in foundational literacy tasks. It assesses competencies such as letter-sound correspondence, word recognition, reading fluency, and basic comprehension across languages

including mother tongue, Filipino, and English (DepEd, 2025). This approach aligns with formative assessment principles, where assessment results guide instructional planning and differentiated support to meet diverse learner needs.

Empirical evidence showed the utilization of CRLA in tracking and enhancing reading proficiency among early grade learners. A notable longitudinal study by Casingal et al., (2024) examined CRLA implementation with 18,159 learners from Grades 1–3 across 15 elementary schools in the School Division Office of Makati over three school years (2022–2025). The research employed CRLA at the beginning and end of school years to assess learners' reading proficiency across intervention categories. The results revealed significant improvements in reading outcomes, particularly for Grade 1 learners, with marked reductions in the number of students requiring the highest level of intervention (Full Refresher). These statistically significant gains indicate that systematic use of CRLA can effectively monitor reading development and support tailored literacy interventions.

Other studies have explored CRLA as part of instructional assessment frameworks. Salilin (2024) utilized CRLA to determine the reading readiness of Grade 1 learners in Oro Elementary School by administering the tool before and after remedial picture-clue activities. CRLA scores served as baseline diagnostic information to identify learners' initial literacy levels and to measure changes following the intervention, illustrating how CRLA can be integrated with curriculum-aligned instructional materials to assess and respond to early literacy needs.

CRLA has also been employed in research analyzing intervention needs among Key Stage 1 learners. Cardoso-Ellema (2024) conducted a study at Judge Antonio R. Montilla Sr. Elementary School, using CRLA data to analyze learners' reading performance, identify required intervention levels, and explore associations between reading needs and learner characteristics. While not strictly experimental, the study demonstrated how CRLA outcomes can inform differentiated instruction and intervention planning tailored to specific learner groups within a classroom setting.

Overall, the studies showed that the CRLA can help teachers understand the reading needs of their learners. Its results can be used to plan appropriate instruction, monitor learners' progress, and identify those who may need additional reading support. Since the CRLA is designed for Key Stage 1 learners, it can provide teachers with useful information for planning activities and interventions based on learners' reading levels. Thus, the assessment can serve as a helpful basis for providing appropriate support to learners who are still developing their early reading skills.

In contemporary literacy education, culturally responsive pedagogy emphasized instructional materials that validate and reflect learners' cultural identities, thereby enabling deeper engagement, comprehension, and motivation among diverse student populations. Culturally responsive workbooks combine this pedagogical approach with physical, tactile learning strategies, producing tangible, printed, and decodable resources that are accessible and meaningful for learners from varied linguistic and cultural backgrounds. Culturally responsive literacy not only connects students lived experiences to reading content but also promotes equity by making physical materials relevant to their identities and local contexts, particularly in early and primary literacy development.

Empirical research highlighted the substantial value of printed, culturally responsive instructional materials in supporting early reading acquisition. Ligoyligoy and Morales (2025) examined culturally responsive phonics instruction through printed decodable workbooks designed for Indigenous Peoples (IP) and early grade learners in the Philippines. Their study demonstrated that tangible workbooks tailored to learners' native linguistic structures and cultural contexts significantly enhanced reading accuracy, phonological awareness, and decoding fluency among struggling readers. The researchers emphasized that physical workbook engagement combined with familiar local terminology and culturally resonant illustrations

amplifies learner focus and hands-on interaction, providing a strong foundation for early literacy development.

Building on this groundwork, recent intervention studies in primary education further demonstrated the direct impact of physical, contextualized reading materials on foundational decoding skills. Cabahug (2025) evaluated the implementation of validated contextualized reading materials among Grade 1 learners and struggling decoders. Using printed, locally adapted reading modules, the study revealed significant gains in letter-sound identification and word-level decoding, effectively advancing learners out of lower reading tiers. Similarly, empirical findings by Pecino and Romero (2025) on printed contextualized intervention materials confirmed that tangible, culturally familiar reading materials directly enhance reading performance and vocabulary development by deepening word comprehension with cultural relevance and learner relatability in mind. These findings collectively reinforce that physical, L1-based workbooks grounded in learners' immediate cultural environments serve as highly effective tools for bridging foundational reading gaps.

The culturally responsive literacy instruction further supported the theoretical foundation for printed culturally responsive reading workbooks. Embedding culturally relevant themes, native language narratives, and familiar visual representations in physical workbooks not only fosters academic achievement but also affirms learners' cultural identities, builds confidence, and deepens comprehension. This aligns with constructivist principles that early literacy tools should be physically interactive and socially situated, allowing young learners to manipulate print, trace letters, and connect written symbols directly to their spoken mother tongue and lived experiences.

In light of these findings, printed culturally responsive reading workbooks represent a pedagogically sound and equitable instructional strategy for early literacy development. By integrating local narratives, familiar imagery, and structured L1 phonics activities into tangible workbook formats, these learning resources bridge the gap between abstract print concepts and the learner's everyday cultural reality. These insights underscore the continued necessity of developing, validating, and implementing printed contextualized workbooks to resolve persistent decoding deficits and elevate reading performance among Key Stage 1 emergent readers.

Overall, the reviewed literature and studies provided useful information on how reading workbooks can be developed, evaluated, implemented, and assessed for young learners. The studies showed that reading materials should be organized, appropriate for the learners' level, and connected to their language, culture, and everyday experiences. Research on culturally responsive literacy also showed the importance of using materials that reflect learners' backgrounds and experiences, as these can help make reading activities more meaningful to them.

The studies on expert validation further showed that having qualified reviewers examine the content and presentation of instructional materials helps ensure that the materials are accurate, appropriate, and suitable for learners. Likewise, studies using reading assessments such as the CRLA showed how assessment results can help teachers identify learners' reading needs and monitor their progress. Taken together, these studies provide a basis for the present research in developing and validating a culturally responsive reading workbook that considers the reading needs, language, culture, and experiences of Key Stage 1 learners.

Theoretical/Conceptual Framework

This study was grounded in Emergent Literacy Theory (Clay, 1966), which posits that literacy development begins before formal reading instruction and progresses through meaningful interaction with language and print. The theory posits that young learners develop foundational skills such as phonemic awareness, vocabulary, letter recognition, and early comprehension through exposure to structured literacy

experiences. These early interactions help learners develop the basic competencies needed to understand written language. Thus, providing developmentally appropriate reading materials is essential for supporting the literacy development of beginning readers.

The relevance of Emergent Literacy Theory to this study lies in its emphasis on providing structured experiences that support the gradual development of reading skills. Learners identified as emergent readers in Key Stage 1 require guided literacy activities to build essential reading competencies. The contextualized workbook developed in this study provides structured activities, including letter recognition, phonics, word identification tasks. Through repeated engagement with these activities, learners gradually strengthened their literacy skills and progressed toward independent reading.

Supporting this study was Contextualized Learning Theory (Johnson, 2002), which emphasizes that learning becomes more meaningful when instructional content is connected to learners' real-life experiences and cultural background. This theory suggests that learners understand and retain knowledge more effectively when learning materials reflect familiar situations. By linking new information with prior experiences, culturally responsive learning materials enhances engagement and comprehension. In literacy instruction, culturally responsive materials help learners understand texts more easily because the content relates to their daily environment.

In relation to this study, the culturally responsive workbook incorporated familiar themes, simple narratives, and culturally relevant situations that reflected learners' local context. Presenting reading activities within meaningful contexts encouraged learners' participation and interest in literacy tasks. This approach helped learners construct meaning as they developed essential reading skills. As a result, culturally responsive materials supported the improvement of early literacy abilities among Key Stage 1 emergent readers.

These theories provided the theoretical foundation for this study. Emergent Literacy Theory explains how foundational reading skills developed through structured exposure to literacy experiences, while Contextualized Learning Theory emphasized the importance of meaningful and relevant learning materials. Integrating these perspectives supported the design of instructional resources that are both developmentally appropriate and contextually relevant. These theories, therefore, guided the development and evaluation of the culturally responsive workbook aimed at improving the early reading literacy of Key Stage 1 emergent readers.

This study was anchored on the premise that exposure to structured reading activities and contextualized learning materials played a significant role in improving early reading literacy among Key Stage 1 emergent readers. Early reading literacy is influenced not only by learners' cognitive abilities, but also by the instructional strategies and materials employed. Persistent difficulties among learners in letter and sound recognition, phonological awareness, decoding, and word recognition highlight the need for innovative, contextually relevant instructional resources. Therefore, this study focused on developing and implementing a contextualized literacy workbook specifically designed to support early literacy acquisition in Grades 1 to 3. The workbook is structured to be simple and clear, enabling parents to use it at home to reinforce reading practice and extend learning beyond the classroom.

Figure 1 presents the research paradigm of the study, illustrating the flow of research in the development and evaluation of a culturally responsive workbook designed to improve the early reading literacy of Key Stage 1 emergent readers.

The framework follows the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model, an instructional design framework that shows how the culturally responsive workbook was systematically analyzed, designed, developed, implemented, and evaluated to achieve the desired learning outcomes.

In the Analysis phase, the CRLA results were used to identify the learners' specific literacy difficulties and priority skills for intervention. These identified needs served as the basis for selecting the least-learned

competencies addressed in the workbook. The study identified the early literacy competencies and needs of Key Stage 1 emergent readers, specifically within Reading and Literacy Term 1, under the Phonics and Word Study subdomain. This included target competencies such as producing the sounds of the letters of the learners' first language (L1), identifying L1 letters, and isolating the beginning and/or ending sounds of words, focusing on the letters M, S, A, I, O, B, E, U, T, K, L, and Y. Ultimately, these identified needs and competencies served as the foundation for designing the workbook's content and activities.

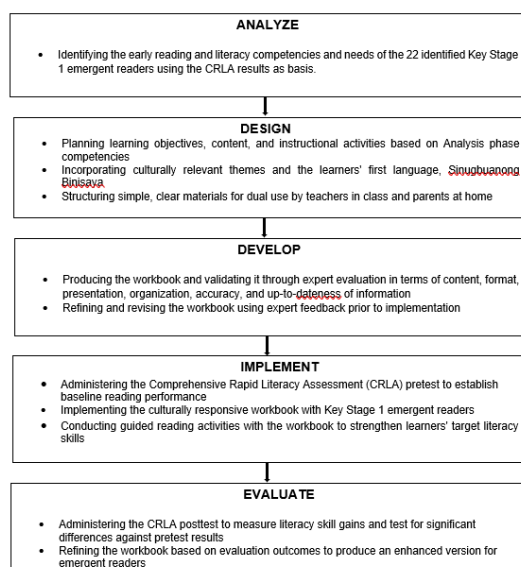
Building upon these findings, in the Design phase, the researcher planned the learning objectives, content, and instructional activities of the culturally responsive workbook based on the competencies identified in the Analysis phase. To achieve this, the design incorporated culturally relevant content, familiar themes, and the learners' first language, Sinugbuanong Binisaya, thereby ensuring that the material would be simple and clear enough for teachers to use in the classroom and for parents to use at home.

Following the layout plan, in the Development phase, the culturally responsive workbook was produced based on the approved design, after which it underwent expert validation in terms of its content, format, presentation and organization, and accuracy and up-to-dateness of information. Subsequently, feedback and recommendations from the experts were used to refine the workbook prior to its implementation.

With the material finalized, in the Implementation phase, a pretest was administered using the Comprehensive Rapid Literacy Assessment (CRLA) to determine the baseline reading performance of the identified emergent readers. This was then followed by the actual implementation of the culturally responsive workbook among Key Stage 1 emergent readers at Dugyaman Elementary School, wherein learners engaged in guided reading activities using the workbook to practice and strengthen their literacy skills.

Finally, in the Evaluation phase, a posttest using the CRLA was administered to measure the learners' literacy skills after utilizing the workbook and to determine whether a significant difference existed between the pretest and posttest results. The outcomes of this evaluation consequently served as the basis for refining the material, resulting in an enhanced culturally responsive workbook for Key Stage 1 emergent readers. Furthermore, consistent with the cyclical nature of the ADDIE model, insights gained from the Evaluation phase may also be carried back into further analysis and redesign, allowing the workbook to be continuously improved as a practical resource for reading instruction and early grade literacy intervention.

Figure 1. The Research Paradigm Showing the Flow of the Study



Objectives of the Study

This study designed and developed a culturally responsive workbook for Key Stage 1 emergent readers of Dugyaman Elementary School in the Division of Butuan City. Specifically, it sought to: (1) design and develop a culturally responsive workbook for early reading literacy; (2) determine the evaluation of experts on the developed culturally responsive workbook in terms of content, format, presentation and organization, and accuracy and up-to-dateness of information; (3) determine the level of literacy skills of the emergent readers before and after the utilization of the culturally responsive workbook for early reading literacy; (4) determine whether a significant difference exists in the level of literacy skills of the Key Stage 1 emergent readers before and after the utilization of the culturally responsive workbook for early reading literacy; and (5) propose enhancements to the culturally responsive workbook based on the findings of the study.

Methodology

This study employed a developmental-evaluative research design to design, develop, validate, and determine the effectiveness of a culturally responsive workbook for early reading literacy among Key Stage 1 emergent readers of Dugyaman Elementary School, Butuan City. The study involved 22 identified emergent readers from Grades 1 to 3 who were purposively selected based on their Comprehensive Rapid Literacy Assessment (CRLA) results. Data were gathered using the CRLA pre-assessment and post-reading assessment to determine learners' literacy skills before and after the utilization of the workbook and an expert validation tool adapted from the DepEd Learning Resource Management and Development System (LRMDS) Evaluation Rating Sheet to evaluate the workbook in terms of content, format, presentation and organization, and accuracy and up-to-dateness of information. The workbook underwent expert validation by a Reading Coordinator, Master Teachers, and School Heads prior to implementation. Following the necessary approvals and parental consent, the workbook was implemented for six weeks through structured reading sessions conducted four times a week. Data were analyzed using frequency and percentage to describe the learners' reading profiles, weighted mean to determine the experts' evaluation of the workbook, and paired-samples t-test to determine whether a significant difference existed between the pretest and posttest literacy skills of the learners. The findings served as the basis for enhancing the culturally responsive workbook for early reading literacy.

Results and Discussion

Problem 1. How may a culturally responsive workbook for early reading literacy be designed and developed for Key Stage 1 emergent readers?

The design and development of the culturally responsive workbook for early reading literacy was guided by the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model. The process integrated baseline reading assessment, curriculum alignment, cultural contextualization, structural drafting, expert validation, implementation, and post-reading assessment to address the specific reading needs of Key Stage 1 learners.

In the Analysis phase, a comprehensive needs assessment was conducted using local reading assessment data gathered via the Department of Education's Comprehensive Rapid Literacy Assessment (CRLA) at Dugyaman Elementary School. The school's Assessment Report for School Year 2025–2026 revealed that 22 Key Stage 1 learners—specifically two Grade 1, eight Grade 2, and twelve Grade 3 pupils—were

performing at emergent reader level. Based on the CRLA diagnostic results, these learners exhibited severe difficulties in foundational reading skills, establishing the specific baseline evaluation and competency mapping required for the study, consistent with Clay's (1966) Emergent Literacy Theory, which holds that literacy instruction should build on learners' existing foundational skills through structured, developmentally appropriate exposure to print. The least learned competencies under the Phonics and Word Study subdomain, as conceptualized in the study's framework, included: (1) producing the sound of target L1 letters (M, S, A, I, O, B, E, U, T, K, L, Y), (2) identifying target L1 letters, and (3) isolating beginning and/or ending sounds in words. Addressing these core skill deficits served as the primary foundation for mapping the core contents of the workbook directly against the Department of Education (DepEd) Reading and Literacy Curriculum Guide for Term 1.

Building upon these findings, in the Design phase, the researcher planned the learning objectives, content, and instructional activities of the workbook based on the competencies identified in the Analysis phase. To achieve cultural and pedagogical alignment and ensure that tasks addressing these least learned competencies were meaningful and engaging, the workbook was written in Sinugbuanong Binisaya (L1), adhering to Mother Tongue-Based Multilingual Education (MTB-MLE) principles, in line with Johnson's (2002) Contextualized Learning Theory, which holds that learning becomes more meaningful when instructional content is connected to learners' real-life experiences and cultural background. Reading activities, simple narratives, and visual illustrations were contextualized around the daily routines, local environment, and natural background of Indigenous Peoples (IP) learners at Dugyaman Elementary School in Barangay Anticala, Butuan City. Simple, clear activity instructions were embedded to enable parents to facilitate guided reading practice at home, extending learning beyond the classroom, thereby ensuring that the material would be simple and clear enough for teachers to use in the classroom.

Following the design, in the Development phase, the culturally responsive workbook was produced based on the approved design. Learning activities were scaffolded sequentially through activity sequencing and layout to target each least learned competency systematically, consistent with Clay's (1966) Emergent Literacy Theory, which emphasizes that literacy skills develop gradually through repeated, structured engagement with print. The tasks were organized into three progressive sections: (1) L1 Letter and Sound Recognition, (2) Initial and Final Sound Isolation, and (3) Word Building and Sentence Reading. The tasks moved progressively from introducing letter forms and L1 sound production alongside familiar local objects, to isolating beginning and ending sounds, and finally to decoding simple words and basic sentences. Visual formatting prioritized child-friendly typography, proper spacing, high-contrast print, and culturally relevant illustrations to maximize readability and maintain learner interest. The draft then underwent expert evaluation, in which it was formally evaluated by a panel of five expert evaluators—including one Reading Coordinator, two Master Teachers, and two School Heads—using the DepEd LRMS Rating Sheet for Print Materials across four key domains: Content, Format, Presentation and Organization, and Accuracy and Up-to-Dateness of Information. Specific recommendations regarding visual arrangement, print layout, and visual alignment were incorporated to refine the draft prior to deployment.

With the material finalized, in the Implementation phase, a pretest was administered using the CRLA to determine the baseline reading performance of the identified emergent readers. This was then followed by the actual implementation of the culturally responsive workbook among Key Stage 1 emergent readers at Dugyaman Elementary School, carried out during structured reading intervention sessions four times a week for six weeks with the 22 identified learners, wherein learners engaged in guided reading activities using the workbook to practice and strengthen their literacy skills, reflecting the sustained, structured exposure to print that Clay's (1966) theory identifies as central to literacy development, alongside the culturally grounded engagement emphasized by Johnson's (2002) theory.

Finally, in the Evaluation phase, a posttest using the CRLA was administered to measure the learners' literacy skills after utilizing the workbook and to determine whether a significant difference existed between the pretest and posttest results. The outcomes of this evaluation, together with classroom implementation feedback, provided the empirical basis for refining the instructional material into its final form, the Enhanced Culturally Responsive Workbook for Key Stage 1 Emergent Readers.

Problem 2. How may the play-based materials be designed, developed, and validated by experts in terms of content, learning outcomes, and manipulatives?

Table 1. The Experts' Evaluation of the Culturally Responsive Workbook for Early Reading Literacy

Evaluation Dimension	Weighted Mean	SD	Verbal Interpretation	Interpretation
Content	3.97	0.06	Very Satisfactory	High Quality
Format	3.99	0.11	Very Satisfactory	High Quality
Presentation and Organization	4.00	0.00	Very Satisfactory	High Quality
Accuracy and Up-to-Dateness of Information	4.00	0.00	No Errors Present	High Quality
Overall Weighted Mean	3.99	0.04	Very Satisfactory	High Quality

Legend: 1.00–1.49 = Poor/Very Poor Quality; 1.50–2.49 = Unsatisfactory/Poor Quality; 2.50–3.49 = Satisfactory/Good Quality; 3.50–4.00 = Very Satisfactory/High Quality. For Accuracy and Up-to-Dateness of Information: 1.00–1.49 = Full of Errors/Very Poor Quality; 1.50–2.49 = With Major Errors/Poor Quality; 2.50–3.49 = Minor Errors/Good Quality; 3.50–4.00 = No Errors Present/High Quality.

Table 1 presents the summary of the experts' evaluation of the culturally responsive workbook for early reading literacy in terms of content, format, presentation and organization, and accuracy and up-to-dateness of information. The overall weighted mean of 3.99 was verbally interpreted as *Very Satisfactory* and described as *High Quality*. This indicates that the developed workbook satisfied the standards prescribed by the Department of Education Learning Resources Management and Development System (LRMDS) for instructional materials and was considered suitable for use among Key Stage 1 emergent readers.

Among the four evaluation dimensions, presentation and organization and accuracy and up-to-dateness of information both obtained the highest weighted mean of 4.00. In terms of presentation and organization, this finding suggests that the workbook presented ideas clearly, maintained a logical sequence of lessons and activities, utilized age-appropriate vocabulary, and provided engaging and comprehensible reading materials for the target learners. The result indicates that the workbook was organized in a manner that supported learning and comprehension among emergent readers. This finding is consistent with the study of Aclin (2025), who reported that presentation and organization emerged as the highest-rated domain in the evaluation of contextualized reading materials. Similarly, Narag (2026) emphasized the importance of coherent lesson sequencing and instructional organization in promoting learner engagement, while Adler (2021) noted that clear structural organization and content hierarchy enhance readability and learner comprehension.

The dimension on accuracy and up-to-dateness of information likewise obtained a perfect weighted mean of 4.00, indicating that the workbook was free from conceptual, factual, grammatical, computational, and obsolete-information errors. This result suggests that the workbook provides learners with reliable, accurate, and developmentally appropriate instructional content. The finding supports the observations of Macatigue and Liquido (2025), who emphasized that content accuracy and grammatical precision are fundamental requirements in the evaluation of contextualized reading resources. Their study further noted that materials

receiving perfect ratings on accuracy indicators contribute positively to literacy development by eliminating errors that may hinder learning.

Format also received a very high evaluation, obtaining a weighted mean of 3.99, verbally interpreted as *Very Satisfactory* and described as *High Quality*. This finding indicates that the workbook's prints, illustrations, design and layout, paper and binding, and size and weight were appropriate and suitable for Key Stage 1 learners. The result suggests that the workbook's visual and physical characteristics effectively supported learners' engagement and readability. This finding agrees with Macatigue and Liquido (2025), who reported that well-designed reading resources earned very satisfactory ratings for technical and interface design. Likewise, Narag (2026) found that effective visual presentation increased learner acceptability of contextualized instructional materials. Adler (2021) further emphasized that print design, spacing, and layout significantly influence reading comprehension and information processing.

Content obtained the lowest weighted mean among the four domains, although it still garnered a very high rating of 3.97. This indicates that the workbook content was developmentally appropriate, aligned with curriculum objectives, capable of developing higher-order thinking skills, culturally responsive, and free from bias. The result suggests that the workbook successfully incorporated culturally relevant experiences and contextualized literacy activities suitable for Indigenous Peoples learners. This finding supports the results of Ligoyligoy et al. (2025), who found that culturally responsive and contextualized reading materials significantly improved learners' reading outcomes. Similarly, Aclin (2025) reported that contextualized instructional materials reflecting learners' local environment received very satisfactory ratings from content experts. Narag (2026) likewise demonstrated that culturally grounded learning materials strengthened both academic learning and cultural appreciation among learners.

Overall, the findings indicate that the culturally responsive workbook possesses high-quality content, format, presentation and organization, and accuracy and up-to-dateness of information. Consistent with the findings of Ligoyligoy et al. (2025), Aclin (2025), Macatigue and Liquido (2025), Narag (2026), and Adler (2021), the results demonstrate that culturally responsive and developmentally appropriate instructional materials can meet established quality standards while providing meaningful and engaging learning experiences for young readers. Consequently, the workbook may be considered a viable instructional resource for supporting the early reading literacy development of Key Stage 1 emergent readers.

Problem 3. What is the level of literacy skills of the emergent readers before and after the utilization of the culturally responsive workbook for early reading literacy?

Table 2 presents the frequency and percentage distribution of the participants' reading literacy before and after the intervention, based on the Comprehensive Rapid Literacy Assessment (CRLA) benchmarks for Key Stage 1 learners. In the pre-test, the majority of the participants were in the lower reading profiles. Twenty out of 22 learners (90.91%) obtained scores within the Rhyme Score (R) 0–14 range, classified as Full Refresher, while only 2 learners (9.09%) were in the Rhyme Score (R) 15–20 range, classified as Moderate Refresher. None of the participants reached the Sentence Score (S) 7–16 or (S) 17–20 categories. This baseline result shows that most of the learners were still developing basic phonological and word-level reading skills and had not yet progressed to sentence-level reading.

Table 2. Frequency And Percentage Distribution of The Participants' Level of Literacy Skills Before and After the Intervention

Score range	Pre test		Post test		Literacy Skills
	freq	%	freq	%	
R 0-14	20	90.91	0	0	Full refresher
R 15-20	2	9.09	0	0	Moderate refresher
S 7-16	0	0	10	45.46	Light refresher
S 17-20	0	0	12	54.54	Grade ready
Total	22	100	22	100	

After the intervention, a clear shift in the learners' reading profiles was observed. None of the participants remained in the Full Refresher or Moderate Refresher categories. Instead, 10 learners (45.46%) reached the Sentence Score (S) 7–16 range or Light Refresher level, while 12 learners (54.54%) reached the Sentence Score (S) 17–20 range or Grade Ready level. Thus, all 22 participants progressed from the lower rhyme-based reading categories to the sentence-level reading categories after using the culturally responsive workbook.

During the implementation, the learners' engagement with the workbook activities was also observed. At the beginning of the intervention, many of them waited for the teacher to give each instruction and required close guidance before starting an activity. As the sessions continued, they became more familiar with the activities, instructions, and learning routines, and several were observed proceeding with the next activity before the teacher gave further instructions. This shift was also reflected in the learners' engagement with the reading activities: rather than repeatedly waiting for assistance, they gradually learned how to approach the activities on their own.

The descriptive results indicate a substantial improvement in the learners' reading profiles following the intervention. The movement of all participants from the rhyme-level categories to sentence-level categories indicate that the learners developed skills beyond basic phonological awareness and were able to perform tasks requiring sentence-level reading.

This pattern is consistent with the findings of Salilin (2024), who likewise administered the CRLA before and after remedial picture-clue activities among Grade 1 learners to measure changes in reading readiness following a targeted intervention. Their findings support the use of CRLA as a tool for measuring the effectiveness of literacy interventions delivered to struggling early grade readers.

Overall, Table 3 shows a notable upward movement in the participants' literacy profiles, accompanied by observable changes in classroom behavior from initially depending on teacher instructions to gradually completing activities with greater independence. These findings support the effectiveness of the culturally responsive workbook in helping the learners progress toward sentence-level reading while developing greater independence in the learning process.

Problem 4. Is there a significant difference in the level of literacy skills of the Key Stage 1 emergent readers before and after the utilization of the culturally responsive workbook for early reading literacy?

The results indicated that scribbling spontaneously, identifying the uses of common household items, and matching Table 4 presents the results of the paired-samples t-test conducted to determine a significant difference between the pre-test and post-test literacy skills of Key Stage 1 learners after the implementation of the reading activity using the culturally responsive workbook. It can be seen that the findings reveal (t-value = -8.922, df = 21, p-value = .000) substantial evidence to consider the result significant. The negative t-value

(-8.922) indicates that the pre-test scores were lower than the post-test scores, demonstrating that learners performed considerably better after participating in the intervention. The magnitude of the t-value signifies an exceptionally large improvement in literacy performance. It can be deduced that the observed gains reflect the result of the utilization of the culturally responsive workbook on learners' development of their literacy skills.

Moreover, the significant value ($p=.000$), which is less than .05 level of significance set for statistical analysis, proved that the null hypothesis, which states that, "there is no significant difference between the pretest and post-test result of the literacy skills of the Key Stage 1 learners", is rejected. Therefore, it can be concluded that there is a statistically significant difference between the pretest and the post test results.

Table 3. *Test of significant difference between the pre-test and post-test of the level of literacy skills of Key Stage 1 learners*

pair	mean	SD	t	df	sig	Decision	Conclusion
pretest	10.32	3.213	-8.922	21	.000	Reject null hypothesis	Significant
Post test	16.05	2.836					

This statistical confirmation carries crucial pedagogical and policy implications for early grade reading instruction. Practically, the significant score increase indicates that integrating Sinugbuanong Binisaya and locally familiar cultural references directly addresses core learning gaps in phonics and sound isolation among Indigenous Peoples (IP) learners. Furthermore, it suggests that contextualized self-learning materials serve as effective scaffolding tools not only for classroom teachers but also for parents facilitating reading practice at home. These findings highlight the strategic necessity for educational stakeholders to continuously invest in developing culturally grounded, mother-tongue instructional resources to bridge foundational literacy divides in early Key Stage 1 education.

The present study adds to the growing literature validating structured literacy interventions. For instance, Bandala (2024) confirmed through a quasi-experimental pretest-posttest framework that systematic phonics instruction significantly enhances reading performance—a trend mirrored by the statistically significant pretest-posttest gains ($p < .05$) observed in this study. Similarly, Lerongan (2025) highlighted that pattern-based, structured strategies outperform traditional rote-memorization instruction in driving student progress. Together, these convergent findings underscore that structured, culturally grounded resources serve as highly effective catalysts for early literacy development.

Problem 5. Based on the findings of the study, how may the culturally responsive workbook for early reading literacy be enhanced?

Based on the quantitative findings indicate that the culturally responsive workbook obtained generally high expert evaluations; however, the lowest weighted mean under the Content domain was 3.80 (SD = .447) for the indicator on enhancing desirable values and traits, while under the Format domain, the lowest item was 3.80 (SD = .447) for the quality of printing. These results suggest areas for further refinement despite both indicators being verbally interpreted as Very Satisfactory and described as High Quality. Specifically, the workbook may be enhanced by incorporating more explicit realistic illustrations and examples using situations that reflect learners' family, community, and cultural experiences. In addition, the printing quality may be improved through high-resolution printing, clearer reproduction of letters and illustrations, consistent color registration, and durable, child-friendly materials to ensure readability and visual appeal.

Conclusions

Based on the findings of the study, the following conclusions were drawn:

1. Anchoring the development process in the ADDIE model, and grounding the workbook's content and language in the learners' immediate cultural and linguistic context through MTB-MLE and IPed principles, is an effective approach for producing a supplementary reading resource that directly targets specific, diagnostically identified literacy gaps rather than relying on generic, one-size-fits-all instructional materials.
2. The culturally responsive workbook is a high-quality and pedagogically sound instructional material based on expert evaluation. Its strong ratings across the four LRMS domains demonstrate that contextualizing reading materials according to learners' language, cultural background, and learning needs can produce an instructional resource that is appropriate, organized, accurate, and suitable for supporting early reading instruction.
3. The consistent upward movement of all 22 learners out of the lower reading categories indicates that the culturally responsive workbook was effective in advancing emergent readers toward grade-level reading proficiency, regardless of their initial literacy level.
4. The study concludes that the use of the culturally responsive workbook significantly improved the literacy skills of the Key Stage 1 learners, as evidenced by the higher post-test performance compared with the pre-test results. The findings indicate that the workbook was an effective instructional intervention in supporting the learners' literacy development.
5. Despite its overall high-quality ratings, the presence of specific, identifiable areas for refinement demonstrates that the culturally responsive workbook was designed as a resource for continuous, evidence-based improvement rather than a fixed, finished product, consistent with the iterative nature of the ADDIE model underlying its development.

Recommendations

Based on the findings of the study, the following recommendations were drawn:

Learners are encouraged to actively engage with the culturally responsive workbook during guided classroom sessions and independent home reading activities. They should practice target L1 letter sounds, word building, and sentence reading to continually build phonological mastery, reading fluency, and learning confidence.

Teachers are recommended to integrate the contextualized Sinugbuanong Binisaya workbook into daily MTB-MLE and reading instruction. They are encouraged to utilize its local examples and illustrations, IPed-aligned themes, and structured reading activities to provide meaningful, culturally rooted learning experiences that address specific phonics and decoding deficits among struggling early grade readers.

School heads and instructional leaders should support the sustained utilization and physical production of the workbook by allocating DepEd MOOE and IPed funds. They should facilitate School Learning Action Cell (SLAC) sessions, capacity-building workshops, and teacher orientations focused on contextualized material development and effective dual-language instruction.

Curriculum planners are encouraged to adopt and scale contextualized workbooks as official supplementary resources for Key Stage 1. Incorporating localized contexts, native language structures, and multi-sensory learning tools ensures that early grade literacy programs remain learner-centered, culturally inclusive, and aligned with DepEd standards.

Researchers are recommended to conduct further studies evaluating the long-term impact of culturally responsive workbooks across larger learner populations, additional grade levels, and other learning areas (such as Numeracy or Filipino). They may also investigate the longitudinal effects of contextualized L1 reading interventions on learners' academic achievement and comprehension skills in higher Key Stages.

References

- Aclin, B. U. (2025). Development, validation and perceived effectiveness of contextualized reading material for multigrade English class. *International Journal For Multidisciplinary Research*, 7(3).
- Adler, K. (2021). *How does text design affect reading comprehension of learning materials?* [Master's thesis]. DiVA Portal.
- Bandala, B. P. (2024). Effectiveness of phonics instruction in the beginning reading performance of Grades 1 & 2 pupils: Basis for instructional supervision. *International Journal of Advanced Multidisciplinary Studies*, 4(4), 1–12.
- Belarde, S. M. F., Brabonga, J. B., & Francia, M. P. S. (2021). Development of a reading workbook for kindergarten learners.
- Cabahug, K. S. C. (2025). The implementation of a validated contextualized reading material to enhance decoding skills of Grade 1 learners. *Pantao: The International Journal of the Humanities and Social Sciences*, 4(2), 891–899.
- Capaluran, C. A. (2024). A decodable reader in Southern Sorsoganon for grade one pupils. *International Journal of Innovative Science and Research Technology*, 9(5), 1845–1852.
- Cardoso-Ellema, M. Z. P. (2024). *Unlocking academic potential: A comprehensive analysis of intervention needs using CRLA in an elementary school*. *Pantao Journal of Humanities and Social Sciences*, 3(3), 25–xx.
- Casingal, C. P., Laud, G. V., & Balaba, M. F. C. (2024). *Longitudinal assessment of reading proficiency through CRLA: A three-year analysis of Grade 1–3 learners in SDO-Makati (2022–2025)*. *International Journal of Education Review*, 7(1), 32–45.
- Clay, M. M. (1966). *Emergent reading behaviour*. University of Auckland. <https://files.eric.ed.gov/fulltext/ED134305.pdf>
- Dela Roca, A. E. (2025). *Developing localized reading materials: Addressing comprehension levels of Key Stage 1 and 2 learners*. *International Journal of Research in Social Science and Innovation*, 12(13), 183–193.

- Dela Rosa, J. M., & Ramos, L. C. (2025). *Effectiveness of play-based learning on the reading levels of Grades 1 to 3 learners during the implementation of National Learning Camp in Anabu II Elementary School*. ResearchGate.
- Department of Education. (2023). *Basic education report 2023*.
<https://www.deped.gov.ph>
- Department of Education. (2025). *Administration of the Comprehensive Rapid Literacy Assessment (CRLA) for Key Stage 1 learners and the Philippine Informal Reading Inventory (Phil-IRI) for Key Stage 2 and 3 learners* (Regional Memorandum). DepEd Region.
- Ehri, L. C. (2020). The science of learning to read words: A case for systematic phonics instruction. *Reading Research Quarterly*, 55(S1), S45–S60.
- Esteban, M. (2026). *Development, acceptability, and effectiveness of phonemic awareness learning resource for kindergarten learners*. *International Journal of Sustainability and Advanced Integrated Research*, 2(1), 339–346.
- Fauziah, M., FAUZIAH, Y., & Dzulkurnain, M. I. (2025). Development of lesson study-based learning materials to enhance reading skills of elementary school students. *MULTIDISCIPLINARY SCIENCE JOURNAL* Учредители: Malque Publishing, 7(1), 2025062.
- Ganske, K. (2021). *Word journeys: Assessment-guided phonics, spelling, and vocabulary instruction* (3rd ed.). Guilford Press.
- Gemino, H. S., Rosillo, N. B., Bacia, N. B., Santosidad, J. E. C., Mangubat, R. B., Bullo, M., Ching, R. C., & Gonzales, L. V. (2025). *Improving the reading skills of Grade 2 non-reader learners through improvised phonic learning materials*. ResearchGate.
- Gillon, G. T., McNeill, B., & Dodd, B. (2024). Phonological awareness intervention and reading development in early learners. *Educational Research Review*, 41, 100558.
- Goodman, A. M., Mcbain, R. A., Ye, Y., & Maitreesophon, B. (2023). Reading for Comprehension, Retention and Building Knowledge: What the Research says about how to Enhance and Build Student Knowledge Across Curriculum Areas. *Journal of Legal Entity Management and Local Innovation*, 9(8), 1633-1654.
- Hosain, S. J., & Manoos, L. M. M. (2023). DepEd early language, literacy, and numeracy program and its relationship on the academic achievement of learners in the selected elementary schools in South Luzon: Basis for the development framework for literacy, and numeracy instructions for secondary schools. *Ignatian International Journal for Multidisciplinary Research*, 1(3), 242-252.
- Johnson, E. B. (2002). *Contextual teaching and learning: What it is and why it is here to stay*. Corwin Press.
- Jumao-As, J., Fuentes, J. L., Lacar, L., Fuertes, G. J., Erag, C., & Tagaylo, C. (2025). Reading Remediation Program and Grade 4 Pupils' Reading Comprehension. *Asian Journal of Education and Social Studies*, 51(6), 365-377.

- Kılınçcı, E., & Bayraktar, A. (2021). Early literacy materials and teacher practices in preschool classrooms. *Pegegog*, 1133.
- Kim, Y. S., et al. (2023). Reading development and difficulties in early elementary education. *Reading Research Quarterly*. <https://doi.org/10.1002/rrq.499>
- Lear, M. (2020). Effectiveness of the contextualized and Localized sinama instructional material for grade 1. *Sci. Int.(Lahore)*, 32(1), 37-40.
- Lerongan, D. S. (2025). The efficacy of word study strategy in improving the spelling skills. *International Journal of Research and Innovation in Social Science*, 9(3), 1065–1070.
- Ligoyligoy, J. M., & Morales, J. L. (2025). Culturally Responsive Phonics Instruction Through Decodable Workbooks Supporting Struggling Readers Among Ip Learners. *Ignatian International Journal for Multidisciplinary Research*, 5(1).
- Ligoyligoy, J. M., Saidina-Lampatan, H., Agri, R. M. P., Guial, J. C., Peñaredondo, A. C., Dumalay, E. D., & Morales, J. L. (2025). *Culturally responsive phonics instruction through decodable workbooks: Supporting struggling readers among Indigenous Peoples learners. Ignatian International Journal for Multidisciplinary Research*, 3(5), 887–904.
- Luceñara, C. (2023). Effectiveness of contextualized learning materials in improving students' reading skills and comprehension levels. <https://ejournals.ph/article.php?id=21023>
- Luceñara, C., Sambayon, J., Luceñara, D., Bayron, Q., Peñaloga, R., & Larombe, E. (2023). Effectiveness of Contextualized Learning Materials in Improving the Reading Skills and Comprehension Level of the Students. *Psychology and Education: A Multidisciplinary Journal*, 7(6), 1-1.
- Macatigue, D. G., & Liquido, M. G. E. (2025). Development and validation of digitalized, contextualized reading materials for Grade 3 learners. *Randwick International of Education and Linguistics Science Journal*, 6(2), 330–344.
- Mateo Clement, M. T. (2025). Culturally Responsive Literacy Instruction in Personalized Reading Programs.
- Narag, J. (2026). Design and validation of a contextualized self-learning module for Pag-aaral ng Kasaysayan at Lipunang Pilipino. *The International Review of Multidisciplinary Research*, 1(9), 60–78.
- Pecino, J. A., & Romero, F. C., Jr. (2025). Contextualized intervention materials and reading performance of Grade 2 learners. *Journal of Emerging Technologies and Innovative Research*, 12(5), i798–i805.
- Pimentel, C. (2025). Contextualized reading intervention material and its effect on learners' reading performance. <https://cognizancejournal.com/vol5issue2/V5I212.pdf>

- Raman, K., Xavier, J. X. M., Khairuddin, N. I., Hashim, H., David, S. A. R., & Cruz, G. R. C. (2025). *READIBUDDY: A culturally relevant literacy tool for empowering Malaysian girls*. Forum for Linguistic Studies, 7(12), 1132–1146.
- Salilin, M. J. D. (2024). *The development and validation of picture clues towards the reading readiness of Grade I learners* [Research study]. *Randwick International of Education and Linguistics Science Journal*, 6(2).
- Santuya, G. R. B. (2025). Learners' level of reading comprehension: Basis for contextualized reading materials. *Pantao Journal of Humanities and Social Sciences*, 4(2), 92–104.
- Semilla, J.-R. B., Parmisana, V. R., Fajardo, L. L., Abucayon, R. L., Dinoro, A. P., & Tabudlong, J. M. (2023). Innovation in early reading instruction: The development of e-learning materials in mother tongue. *International Journal of Learning, Teaching and Educational Research*, 22(7).
- Suggate, S., Lenhard, W., Neudecker, E., & Schneider, W. (2022). Long-term effects of reading instruction on literacy development. *Scientific Studies of Reading*.
- Tado, M. A. E., Jamco, D. P., Jarabelo, M. P., & Tado, G. C. (2026). *The effects of developmentally appropriate learning materials on reading proficiency of Grade 2 low emerging learners*. *International Journal of Research in Engineering Science and Management*.
- Tagum, J. F. (2026). Development and validation of localized literature-based supplementary materials in English 7. *International Journal of Sustainability and Advanced Integrated Research*, 2(2), 2027–2035.

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