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Culturally Sensitive Reading Intervention Material to Boost Reading Readiness Among Key Stage 2 Non-readers

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Abstract

This study aimed to develop and evaluate a Culturally Sensitive Reading Intervention Material to boost the reading readiness of Key Stage II non-readers at Tagkiling Tribal Elementary School, Tagkiling, Anticala, Butuan City, during School Year 2026–2027. The study employed a developmental-evaluative research design anchored on Vygotsky's Sociocultural Theory and guided by the ADDIE model. Twenty-five (25) Key Stage II learners identified as non-readers were purposively selected as participants. The study utilized the Phil-IRI, an expert validation tool based on the LRMSD criteria, and a learner perception questionnaire to assess reading performance, material quality, and learner reactions. Descriptive statistics, including frequency, percentage, median, and weighted mean, were used to analyze the data. The Wilcoxon signed-rank test was used to determine whether a significant difference existed between the learners' pretest and posttest reading performance at the 0.05 level of significance. The findings showed that all 25 learners (100%) were classified at the frustration level during the pretest. After the intervention, 5 learners (20%) reached the independent level, 18 learners (72%) reached the instructional level, and 2 learners (8%) remained at the frustration level. The median reading performance increased from 58% in the pretest to 95% in the posttest. The Wilcoxon signed-rank test indicated a statistically significant difference between the pretest and posttest results ($Z = 4.38$, $p < .001$), with all 25 learners showing improvement. Expert evaluation rated the material Very Satisfactory in content (WM = 3.91), format (WM = 4.00), presentation and organization (WM = 3.96), and accuracy and up-to-datedness (WM = 3.90). Learner reactions were also highly positive, with weighted means of 2.97 for engagement, 2.90 for comprehension, 3.00 for cultural relevance, and 3.00 for participation and interaction, all interpreted as Very Much/Very Effective. The study concludes that the culturally sensitive reading intervention material provides a relevant, engaging, and supportive resource for developing the reading readiness of Key Stage II non-readers. The findings further indicate the value of integrating culturally familiar content, phonics-based activities, guided practice, and interactive learning experiences in reading intervention. The material may be used as a supplementary intervention resource and may be further enhanced through additional comprehension activities, differentiated remediation, continued expert review, and field testing with broader groups of learners.

Keywords: Culturally sensitive reading intervention, reading readiness, Key Stage II non-readers, phonics-based intervention, cultural relevance, reading intervention material

Introduction

Reading is a fundamental skill that serves as the foundation for academic success, personal development, and lifelong learning. It enables learners to access information, construct meaning, and actively participate in society. As emphasized in various literacy studies, reading is a complex process that involves decoding, comprehension, and critical thinking, making it an essential competency across all areas of learning. Central to this process is reading readiness, which refers to the development of prerequisite skills necessary for learners to effectively decode and understand written texts. For learners in the elementary level, particularly in Key Stage II, achieving reading readiness is crucial as it directly influences their ability to succeed in more advanced academic tasks.

In the Philippine educational context, the Department of Education has implemented various reading programs such as the Philippine Informal Reading Inventory (Phil-IRI) and other literacy initiatives to address the increasing number of struggling readers. Despite these efforts, a significant number of learners, especially those in marginalized and culturally diverse communities, continue to experience difficulties in reading. As noted by Ocampo (2022), learners in rural and tribal schools often face challenges such as limited access to instructional materials, inadequate learning support, and socio-cultural barriers that affect their literacy development. These challenges contribute to the widening gap in reading proficiency, particularly among Key Stage II learners who are expected to have already acquired basic reading skills.

In East Butuan District I, particularly in Tagkiling Tribal Elementary School where the researcher is currently teaching, a considerable number of learners remain non-readers despite being in the intermediate grades. Specifically, 27 percent or 25 out of 90 Key Stage II learners have not yet developed adequate reading skills. This situation highlights the urgent need for effective and context-responsive interventions that address not only the cognitive aspects of reading but also the cultural and environmental factors influencing learning.

One promising approach to addressing this issue is the use of culturally sensitive intervention materials. These materials are designed to reflect learners' cultural backgrounds, language, and lived experiences, thereby making learning more meaningful and engaging. When learners see their identities and contexts represented in instructional materials, they are more likely to participate actively and develop a deeper understanding of the content. Integrating cultural relevance into literacy instruction aligns with the principles of inclusive education and supports diverse learners in overcoming barriers to learning.

Moreover, incorporating phonics-based strategies within culturally sensitive materials can further enhance reading readiness. Phonics instruction, which focuses on the relationship between sounds and letters, has been widely recognized as an effective method for developing decoding skills among struggling readers. When combined with culturally relevant content, phonics-based instruction becomes more accessible and relatable, allowing learners to connect new knowledge with familiar experiences. This integrated approach has the potential to significantly improve learners' reading skills, particularly for those who have not yet developed foundational literacy competencies.

Given these considerations, this study developed and evaluated a culturally sensitive intervention material designed to boost the reading readiness of Key Stage II non-readers. The study focused on assessing the effectiveness of the material in improving learners' reading performance, as well as examining their responses in terms of engagement, comprehension, cultural relevance, and participation. In addition, the material was evaluated using established criteria to ensure its quality, instructional value, and cultural appropriateness.

Ultimately, this study sought to contribute to the development of effective and inclusive literacy interventions that address the needs of learners with reading gaps. By focusing on culturally sensitive approaches, the research aimed to bridge the reading gap among Key Stage II non-readers and support their journey toward becoming proficient and confident readers

Review of Related Studies

This section presents an extensive review of related literature and studies that support the development and evaluation of a culturally sensitive intervention material designed to enhance the reading readiness of Key Stage II non-readers. The discussion focuses on culturally responsive instruction, phonics-based intervention, contextualized learning materials, instructional material evaluation based on LRMDs criteria, learners' reading performance, and learners' engagement and responses.

Culturally sensitive instruction has become a central approach in modern education, particularly in diverse classrooms. Recent studies emphasize that integrating learners' cultural backgrounds into instruction enhances comprehension, motivation, and academic achievement (Anderson, 2021). This integration also helps learners connect classroom lessons to their everyday experiences, making learning more relevant and engaging. Learners are more likely to engage with instructional materials that reflect their lived experiences, language, and social context Garcia (2022) found that culturally relevant texts significantly improved reading comprehension and participation among elementary learners. This suggests that incorporating familiar cultural references and experiences into reading materials can foster greater learner interest, confidence, and active participation in reading activities. Similarly, Santos (2023) reported that contextualized instructional materials increase learners' motivation and confidence, especially among struggling readers. By presenting lessons through familiar situations and culturally meaningful contexts, these materials can help learners feel more capable and willing to participate in reading activities. Reyes (2024) further noted that culturally adaptive teaching approaches support inclusivity and equity, allowing learners to develop a stronger connection with the content. When instructional materials reflect learners' local language, traditions, experiences, and community contexts, they can reduce barriers to participation and provide more meaningful opportunities for learners with diverse backgrounds. These findings highlight the importance of designing intervention materials that are culturally aligned with learners' needs.

The development of instructional materials required a systematic and learner-centered approach. Recent studies show that culturally sensitive materials must be carefully designed to ensure relevance, inclusivity, and effectiveness (Villanueva, 2024). For Manobo learners, this includes incorporating familiar Manobo words, expressions, cultural practices, community experiences, and locally meaningful illustrations to make reading materials more understandable, relatable, and responsive to their linguistic and cultural background. Instructional materials that incorporate local context, language, and familiar experiences improve learners' comprehension and engagement (Dela Cruz, 2023). For Manobo learners, the use of familiar Manobo words, culturally relevant stories, local settings, traditional practices, and community-based experiences can make reading materials more meaningful and accessible, thereby supporting better understanding and active participation in reading activities. Moreover, Torres (2021) emphasized that well-developed instructional materials enhance teaching efficiency and support differentiated instruction. Continuous improvement of materials based on feedback and evaluation is also essential to ensure effectiveness. These findings support the need to design and refine culturally sensitive intervention materials based on learners' responses and performance.

Phonics-based instruction remains one of the most effective approaches in teaching reading, particularly for non-readers and struggling learners. Recent studies confirm that structured phonics instruction improves decoding skills, word recognition, and reading fluency (Miller, 2021). Systematic instruction that explicitly teaches letter-sound relationships, blending, segmenting, and repeated practice enables beginning and struggling readers to develop stronger word-reading accuracy and fluency. Johnson (2022) found that learners exposed to phonics-based interventions demonstrated significant improvement in reading comprehension and accuracy. This improvement may be attributed to learners' increased ability to accurately decode unfamiliar words, recognize frequently used words, and read connected texts with greater

confidence and fluency. Carter (2023) reported statistically significant differences between pretest and post-test scores of learners who underwent phonics intervention programs. The improvement suggests that systematic practice in letter-sound correspondence, phoneme blending, word decoding, and repeated reading can strengthen learners' foundational reading skills and overall reading performance. Navarro (2024) further emphasized that combining phonics instruction with contextualized materials enhances both decoding and comprehension skills. These studies validate the effectiveness of phonics-based intervention in improving reading readiness among Key Stage II learners.

Phonics is rooted in the understanding that reading is not just about memorizing whole words but about recognizing the sounds that letters and combinations of letters make. When learners understand these sound-letter relationships, they can more effectively decode unfamiliar words, a skill critical to developing fluency and comprehension in reading. For students who have not yet achieved basic reading readiness, phonics-based interventions offer a practical, structured approach to closing these gaps and helping them develop the cognitive and linguistic skills needed for academic success. Research conducted by Torgesen et al. (2021) and Moats (2022) affirms that systematic phonics instruction significantly enhances reading outcomes for students who are at risk of reading failure, particularly in the early stages of education. Explicit instruction in phoneme-grapheme relationships, blending, segmenting, and decoding provides at-risk learners with the foundational skills needed to recognize words accurately and develop greater reading fluency.

Evaluating instructional materials is crucial in ensuring their quality and effectiveness. The LRMDs framework provides criteria for assessing curriculum alignment, content quality, instructional quality, and cultural sensitivity. Recent research highlights that materials aligned with curriculum standards improve learning outcomes and ensure instructional consistency (Torres, 2021). Curriculum-aligned materials help ensure that learning objectives, reading activities, and assessment tasks are appropriately matched to the expected competencies and learners' developmental needs, providing a clear and consistent pathway for skill development. Lopez (2022) emphasized that high-quality content enhances comprehension and retention, while effective instructional design promotes active learning. Well-organized and age-appropriate reading materials that use clear language, relevant examples, engaging activities, and opportunities for guided practice can help learners understand, retain, and apply newly acquired reading skills. Dela Cruz (2023) found that culturally sensitive materials improve engagement and inclusivity. Materials that incorporate learners' local language, cultural practices, familiar community settings, and everyday experiences can make lessons more relatable while encouraging participation and providing equitable learning opportunities for learners from diverse backgrounds. Villanueva (2024) concluded that structured evaluation frameworks ensure that instructional materials meet educational standards and address learners' needs. A systematic evaluation process allows developers to assess the material's content accuracy, relevance, clarity, cultural responsiveness, usability, and alignment with intended learning competencies, thereby providing evidence for its improvement and refinement. These findings support the use of LRMDs in evaluating the developed intervention material.

Assessment of learners' performance is essential in determining the effectiveness of instructional interventions. Pretest and post-test designs are widely used to measure learning gains. Recent studies show that phonics-based and culturally responsive interventions lead to significant improvements in reading performance (Johnson, 2022). Combining explicit phonics instruction with culturally familiar words, stories, settings, and learner experiences can strengthen phonemic awareness, word recognition, decoding, and reading fluency while increasing learners' motivation and confidence to participate in reading activities. Miller (2021) reported increased decoding and fluency skills among learners after intervention. The improvement was associated with systematic practice in phoneme-grapheme correspondence, blending sounds to form words, decoding unfamiliar words, and repeated reading, which helped learners read words more accurately and smoothly. Carter (2023) found statistically significant differences between pretest and post-test scores,

indicating the effectiveness of structured reading programs. The gains suggest that systematic instruction in phonemic awareness, phonics, word recognition, decoding, and guided reading practice can produce measurable improvements in learners' foundational reading abilities. Navarro (2024) also emphasized that contextualized interventions improve comprehension and retention. The use of familiar language, local experiences, culturally meaningful examples, and relatable reading situations can help learners connect new concepts with prior knowledge, resulting in deeper understanding and better retention of reading skills. These findings justify the use of pretest-posttest measures in evaluating reading readiness, as comparing learners' performance before and after the intervention provides evidence of changes in their foundational reading skills.

Learner engagement plays a vital role in the success of instructional interventions. Studies show that culturally sensitive materials significantly enhance learners' motivation, participation, and interaction (Anderson, 2021). Materials that reflect learners' language, cultural traditions, family experiences, and local community contexts can create a sense of familiarity and belonging, encouraging learners to participate more actively and interact confidently during reading activities. Garcia (2022) found that contextualized materials improve comprehension and active participation. Using familiar language, local settings, culturally relevant stories, and everyday experiences helps learners connect new reading concepts with prior knowledge, making lessons easier to understand and encouraging more active involvement in reading activities. Santos (2023) reported that culturally responsive instruction enhances learners' sense of belonging and confidence. When reading materials reflect learners' language, cultural identity, community experiences, and familiar situations, they are more likely to feel represented and valued, which can strengthen their confidence and willingness to participate in learning activities. Reyes (2024) further noted that learners demonstrate higher engagement when instructional materials reflect their identity and experiences. These findings support the inclusion of learner response variables such as engagement, comprehension, cultural relevance, and participation in evaluating instructional materials.

Phonics instruction, focusing on the relationship between sounds and their corresponding letters, has been recognized as a foundational component in early reading development. Recent studies underscore its efficacy in improving reading skills among struggling readers. In 2023, a study by Lindström-Sandahl et al. evaluated a comprehensive phonics program in Sweden for second-graders who struggle with early reading. The controlled randomized trial demonstrated significant improvements in reading skills, highlighting the effectiveness of phonics-based interventions in diverse linguistic context. A study by Arevalo (2025) assessed the impact of an eight-week remedial reading program using the Phil-IRI. Results indicated substantial gains in reading comprehension among Grade 4 learners, suggesting that structured reading interventions can effectively address literacy gaps in the Philippine educational setting.

Reading readiness is widely recognized as a critical foundation for literacy development, particularly among struggling readers in the intermediate grades. Recent global studies emphasize that phonics-based instruction remains one of the most effective approaches in developing early reading skills. According to Juel (2021), students who are poor readers by the end of Grade 3 are highly likely to remain poor readers into their adolescent years, which can have lasting impacts on their educational and life outcomes. Therefore, addressing the reading challenges faced by Grade IV, V and VI non-readers through a structured phonics-based intervention is not only critical for their immediate academic development but also for their long-term success in school and beyond. As stated by Valladolid and Estremera (2026), systematic and explicit phonics instruction significantly improves decoding, word recognition, and spelling skills among learners, particularly in multilingual contexts where language barriers exist. This finding highlights the importance of structured phonics programs in addressing reading difficulties. Similarly, global evidence shows that phonics-based instruction is most effective when delivered systematically and explicitly. Research indicates that learners

benefit when phonics is taught in a structured sequence, allowing them to understand letter-sound relationships progressively.

In addition, contextualized phonics instruction has gained attention in recent years. Suwarsih (2025) found that integrating phonics with contextual learning significantly enhances learners' engagement, confidence, and independent reading behaviors. The study revealed that when learners are exposed to meaningful and familiar contexts, their ability to understand and apply reading skills improves. This suggests that contextualization plays a crucial role in making phonics instruction more effective. Moreover, intervention-based approaches have been proven to improve literacy outcomes. Evidence from large-scale reviews shows that structured reading programs that include phonics, guided instruction, and multisensory strategies significantly improve reading proficiency among struggling learners. These interventions are particularly beneficial for non-readers who require intensive support in developing basic literacy skills.

The reviewed literature and related studies consistently highlighted that culturally responsive instructional materials significantly enhance learners' engagement, comprehension, and overall reading performance. When learning resources reflect learners' cultural backgrounds, experiences, and local contexts, they become more meaningful, thereby fostering deeper understanding and sustained interest in reading activities. In particular, phonics-based interventions have been widely recognized as effective approaches in developing foundational reading skills, especially in improving learners' decoding abilities, word recognition, and reading fluency, skills that are essential for early literacy development.

Finally, the integration of contextualized materials further strengthened the learning process by making instruction more relevant and relatable to learners. This relevance not only increased motivation but also supported better retention of concepts, as learners are able to connect new knowledge with their prior experiences. Ensuring the quality of these instructional materials was equally important; thus, evaluation frameworks such as the Learning Resource Management and Development System (LRMDS) criteria played a vital role in assessing the appropriateness, accuracy, cultural sensitivity, and pedagogical soundness of developed resources.

Theoretical/Conceptual Framework

To deepen the understanding of how culturally sensitive reading intervention material can influence reading development, this study was anchored on Vygotsky's Sociocultural Theory of Learning (Vygotsky, 1978). Vygotsky emphasizes that cognitive development, including literacy, occurs through social interaction within the Zone of Proximal Development (ZPD). Learning occurs effectively when instruction is tailored to the learner's current capability and scaffolded appropriately. Incorporating phonics-based interventions, especially in a culturally sensitive manner, aligns with Vygotsky's view that social context and guided instruction are vital. This theory encourages integrating cultural relevance into phonics instruction, making learning more meaningful for tribal students.

The conceptual framework of this study outlined the key variables and their interrelationships, guiding the investigation into the effectiveness of a culturally sensitive reading intervention material in improving reading readiness among Key Stage II non-readers at Tagkiling Tribal Elementary School. It is grounded on a systematic and structured process of instructional development, supported by the theoretical foundation of the Sociocultural Theory of Learning. The framework assumes that reading readiness among Key Stage II non-readers can be enhanced through a carefully planned and contextually relevant phonics-based intervention that responds to learners' cultural and social realities. Instruction is viewed not merely as the delivery of content but as a dynamic process shaped by interaction, cultural mediation, and guided participation. The phases of instructional development, beginning with the identification of learner needs and culminating in the evaluation of learning outcomes which serve as the structural pathway through which the

intervention is conceptualized and implemented. Within this structure, Vygotsky's theory provides the guiding lens that explains how learning occurs and how instruction can be optimized to support learner development.

At the initial stage of the framework, a thorough examination of learners' reading difficulties, sociolinguistic backgrounds, and prior literacy experiences was undertaken. This stage is essential in identifying the specific needs of Key Stage II non-readers, particularly within a tribal school context where language exposure, cultural practices, and access to literacy resources may differ from mainstream environments. The Sociocultural Theory of Learning is reflected in this process through its emphasis on understanding learners as products of their social and cultural environments. Reading challenges are not viewed solely as individual deficits but as outcomes influenced by interaction, language use, and cultural context. Attention is given to learners' current level of performance as well as their potential for growth when supported, aligning with the concept of the Zone of Proximal Development. This perspective ensures that instructional decisions are grounded in a comprehensive understanding of the learners' context and developmental readiness.

Following this, a structured plan for instruction was formulated, focusing on the development of reading readiness skills such as phonemic awareness, letter-sound correspondence, and word recognition. Instructional objectives were clearly defined, and strategies were selected to ensure that learning experiences are both meaningful and achievable. The Sociocultural Theory of Learning plays a central role in shaping this stage by emphasizing the importance of culturally relevant and socially interactive learning activities. Tasks were designed to align with learners' experiences and to encourage active engagement through collaboration and guided practice. Instruction was intentionally structured to provide support that enables learners to accomplish tasks they cannot yet perform independently, thereby facilitating progression within their Zone of Proximal Development. This approach ensures that learning is scaffolded, interactive, and responsive to individual needs.

The next stage involves the creation and preparation of instructional materials that support the planned intervention. Contextualized phonics-based resources are developed, including visual aids, activity sheets, and reading materials that incorporate familiar language and culturally relevant content. The Sociocultural Theory of Learning is evident in the emphasis on using cultural tools specifically Manobo language and materials that was seen on their day to day life to mediate learning. Materials were designed and evaluated not only to teach phonics skills but also to connect learning with the learners' everyday experiences such, thereby enhancing comprehension and engagement. Scaffolding mechanisms were embedded within the materials, providing structured support through prompts, guided exercises, and visual cues. These resources enabled learners to gradually transition from supported learning to independent reading, reflecting the developmental progression emphasized in the theory.

The delivery of the intervention takes place through structured and interactive classroom practices that prioritize engagement, collaboration, and guided instruction. Learning occurs through meaningful interactions between teachers and learners, as well as among peers. The Sociocultural Theory of Learning is most prominently manifested in this stage, as instruction is facilitated through scaffolding, dialogue, and shared activities. The teacher assumes the role of a facilitator who provides appropriate levels of support, adjusting guidance based on learners' needs and gradually reducing assistance as competence increases. Contextualized materials are used to anchor learning in familiar experiences, making reading tasks more accessible and relevant. Through continuous interaction and guided participation, learners are supported in developing foundational reading skills and gaining confidence in their abilities.

The final stage of the framework focused on assessing the effectiveness of the intervention in improving reading readiness. Evaluation involves both ongoing and end-point assessments that measure learners' progress in phonemic awareness, decoding, and early comprehension. The Sociocultural Theory of Learning informs this process by emphasizing the importance of assessing not only what learners can do

independently but also what they can achieve with support. This approach provides a more comprehensive understanding of learning development, capturing both current performance and potential growth. Continuous assessment allows for the refinement of instructional strategies, ensuring that support remains aligned with learners' evolving needs. The evaluation process also examines the effectiveness of contextualization and scaffolding in facilitating meaningful learning outcomes.

Across all stages of the framework, the Sociocultural Theory of Learning served as the central theoretical foundation that informs both the design and implementation of the intervention. It explained how learning is shaped by social interaction, cultural context, and guided support, providing a coherent explanation for the effectiveness of a contextualized phonics-based approach. The structured process of instructional development ensures that these theoretical principles are systematically translated into practice, resulting in an intervention that is both pedagogically sound and contextually responsive.

In synthesis, the conceptual framework presented a coherent and systematic relationship among learners' identified needs, the instructional processes employed, and the expected learning outcomes. This framework underscored that effective reading instruction must begin with a clear understanding of learners' existing abilities, gaps, and contextual realities, which then inform the design and implementation of responsive and targeted learning materials.

Moreover, reading readiness is viewed not simply as the mastery of discrete literacy skills such as decoding and word recognition, but as a holistic developmental process shaped by meaningful, socially mediated learning experiences. Grounded in sociocultural theory, the framework emphasizes the role of interaction, language, and cultural relevance in facilitating learning, recognizing that learners construct knowledge more effectively when instruction is connected to their lived experiences and familiar contexts. The integration of culturally sensitive content within phonics instruction therefore enhances both engagement and comprehension, making learning more accessible and purposeful.

Through this alignment of theory, pedagogy, and learner-centered design, the framework provides a comprehensive and evidence-based foundation for understanding how well-structured, culturally responsive interventions can address the reading difficulties of Key Stage II non-readers. It ultimately demonstrates that when instruction is intentional, contextually grounded, and responsive to learners' needs, it can significantly improve reading readiness and support sustained literacy development.

This study was anchored on the ADDIE model, which served as the framework for the systematic development and evaluation of the culturally sensitive intervention material. The model provides a structured and learner-centered process that ensures the material is responsive to the needs of Key Stage II non-readers and aligned with curriculum standards.

The Analysis phase focused on identifying the learners' reading difficulties, learning needs, and relevant curriculum requirements. This stage ensured that the intervention material directly addressed the challenges encountered by non-readers and is grounded in the learners' context. In the Design phase, the structure, content, and instructional strategies of the intervention material were carefully planned. This included the selection of appropriate texts, activities, and culturally relevant elements that suit the learners' level and background. The Development phase involved the actual creation and evaluation of the culturally sensitive intervention material based on the design plan. At this stage, the material integrated contextualized, culturally, and linguistically appropriate content to enhance learners' engagement and comprehension. The Implementation phase entailed the use and evaluation of the developed material in the classroom setting, where learners interact with the intervention and teachers facilitate its delivery. This phase allowed for the collection of feedback and observation of learners' responses. Finally, the Evaluation phase determined the effectiveness and quality of the intervention material through expert validation using LRMS criteria, analysis of learners' performance through pretest and post-test, and assessment of learners' responses. The results of this phase served as the basis for further refinement and enhancement of the material.

Overall, the ADDIE model ensured a systematic, responsive, and iterative process in developing an intervention that is both instructionally sound and culturally sensitive, thereby supporting the improvement of reading readiness among Key Stage II non-readers.

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



Objectives of the Study

This study determined the efficacy of a culturally sensitive intervention material in boosting reading readiness among Key Stage II non-readers. Specifically, it sought to: (1) design and develop a culturally sensitive intervention material for Key Stage II non-readers; (2) determine the experts' evaluation of the culturally sensitive intervention material in terms of content, format, presentation and organization, and accuracy and up-to-dateness of information; (3) determine the pretest and posttest performance of the learners before and after the utilization of the culturally sensitive intervention material; (4) determine whether a significant difference exists between the pretest and posttest performances of the learners after the utilization of the culturally sensitive intervention material; (5) determine the reactions of Key Stage II non-readers toward the culturally sensitive intervention material in terms of engagement, comprehension, cultural relevance, and participation and interaction; and (6) propose enhancements to the culturally sensitive intervention material based on the findings of the study.

Methodology

This study employed a developmental-evaluative research design to determine the efficacy of a culturally sensitive intervention material in enhancing the reading readiness of Key Stage II non-readers. The developmental component focused on the design and development of a culturally responsive reading intervention material that addressed learners' needs in phonemic awareness, word recognition, decoding, and reading fluency. The evaluative component involved expert evaluation of the material in terms of content, format, presentation and organization, and accuracy and up-to-dateness of information, as well as the assessment of its effectiveness through learners' reading performance and reactions toward the material. The study was conducted at Tagkiling Tribal Elementary School, Barangay Anticala, Butuan City, involving 25 purposively selected Key Stage II non-readers identified through the Philippine Informal Reading Inventory (Phil-IRI). Data were gathered using the Phil-IRI pretest and posttest to determine learners' reading readiness before and after the intervention, expert evaluation tools based on LRMS criteria, and learner interviews and

response questionnaires to assess engagement, comprehension, cultural relevance, and participation and interaction. Following the necessary approvals and parental consent, the culturally sensitive intervention material was implemented for eight to twelve weeks through structured reading sessions focusing on phoneme segmentation, blending, decoding, and word construction activities. The median was used to determine the learners' pretest and posttest performance, the Wilcoxon Signed-Rank Test was employed to determine whether a significant difference existed between the pretest and posttest scores, and the weighted mean was used to analyze the experts' evaluation of the intervention material and the learners' reactions toward it. The findings served as the basis for enhancing the culturally sensitive intervention material for Key Stage II non-readers.

Results and Discussion

Problem 1. How may a culturally sensitive intervention material be designed and developed to boost reading readiness among Key Stage II non-readers?

The culturally sensitive intervention material was designed and developed as a contextualized, phonics-based reading resource for Key Stage II non-readers. The development process followed the ADDIE model, consisting of Analysis, Design, Development, Implementation, and Evaluation. This systematic process was appropriate because the study sought to identify learners' reading needs, design an intervention responsive to those needs, develop contextualized learning resources, implement the intervention, and evaluate its quality and effectiveness.

During the Analysis phase, the researcher identified the reading needs of Key Stage II learners who had been classified as non-readers. The study focused on foundational reading skills, particularly phonemic awareness, sound-letter correspondence, decoding, word recognition, and early comprehension. The analysis also considered the learners' linguistic, cultural, and environmental context. This was particularly important because the research locale is a tribal elementary school where learners' experiences, language exposure, and access to print resources may differ from those of learners in other settings.

During the Development phase, the planned activities were translated into actual print resources. Visual aids, activity sheets, reading exercises, guided tasks, and contextualized examples were prepared. The material was designed to be simple, readable, attractive, and appropriate to the developmental level of the intended learners. Culturally relevant illustrations and examples were incorporated to make the material meaningful while avoiding cultural, racial, religious, gender, and ideological bias.

In the Design phase, the researcher organized the learning objectives, content sequence, phonics-based activities, and instructional strategies according to the learners' identified reading needs. The material included activities on phoneme segmentation and blending, letter-sound relationships, word construction, word recognition, and decoding unfamiliar words, while incorporating familiar situations, objects, language, and everyday experiences to ensure cultural relevance. The developed culturally sensitive reading intervention material was evaluated by experts using the DepEd LRMDs Evaluation Rating Sheet for Print Resources to assess its accuracy, relevance, clarity, appropriateness, and quality. The experts' feedback and recommendations were used to refine the material and ensure its accuracy and suitability for Key Stage 2 non-readers.

In the Implementation phase, the developed material was used in structured intervention sessions. The researcher served as facilitator and provided guided instruction, scaffolding, individual assistance, and small-group support as needed. The intervention emphasized active participation and interaction, allowing learners to practice reading skills with teacher guidance and through shared activities.

Finally, in the Evaluation phase, the implemented intervention material was evaluated based on the learners' posttest results and their responses and reactions to the intervention. The posttest results were compared with the pretest results to determine the observed changes in learners' reading performance. Learners' engagement, comprehension, cultural relevance, participation, and interaction during the intervention were also considered. The evaluation findings, together with the feedback gathered during implementation, served as the basis for identifying areas that needed improvement and for refining the material to better address the learners' reading needs.

The development process was likewise informed by Vygotsky's Sociocultural Theory of Learning. The material and activities were designed to provide scaffolding within the learners' Zone of Proximal Development. Familiar contexts served as cultural tools for learning, while teacher guidance and interaction supported learners as they moved from assisted performance toward greater independence. Thus, the development process did not treat reading difficulty solely as an individual deficit but considered the role of social interaction, language, culture, and guided participation in literacy development.

Problem 2. How do experts evaluate the culturally sensitive intervention material in terms of content, format, presentation and organization, and accuracy and up-to-dateness of information?

Table 1. The Experts' Evaluation of the Developed Print Resources

Evaluation Area	Weighted Mean	Verbal Description	Interpretation
Content	3.91	Very Satisfactory	Very Effective
Format	4.00	Very Satisfactory	Very Effective
Presentation and Organization	3.96	Very Satisfactory	Very Effective
Accuracy and Up-to-Datedness of Information	3.90	Very Satisfactory	Very Effective
Overall Weighted Mean	3.94	Very Satisfactory	Very Effective

Note. 1.00–1.49 = Not Satisfactory; 1.50–2.49 = Poor; 2.50–3.49 = Satisfactory; 3.50–4.00 = Very Satisfactory.

Table 1 presents the summary of the experts' evaluation of the developed print resources in terms of content, format, presentation and organization, and accuracy and up-to-datedness of information. The overall weighted mean of 3.94 was verbally described as Very Satisfactory and interpreted as Very Effective. This indicates that the developed culturally sensitive intervention material met the standards prescribed in the Learning Resources Management and Development System (LRMDS) evaluation criteria and was considered highly acceptable for instructional use among Key Stage II non-readers.

Among the four evaluation areas, format obtained the highest weighted mean of 4.00, verbally described as Very Satisfactory and interpreted as Very Effective. This finding indicates that the experts unanimously agreed that the material possessed appropriate typography, readability, illustration quality, visual presentation, paper and binding quality, and overall physical design. The result further suggests that the intervention material was learner-friendly and appropriate for the target readers. The uniform ratings across all format indicators demonstrate consistency in the material's visual and physical presentation.

Presentation and organization ranked second, obtaining a weighted mean of 3.96, which was likewise interpreted as Very Satisfactory and Very Effective. This finding indicates that the material presented ideas in a clear, engaging, and understandable manner. The vocabulary level, sentence structure, and presentation style were found appropriate for the intended learners. While all criteria received very satisfactory ratings, the logical and smooth flow of ideas obtained the lowest rating within the domain, suggesting that minor enhancements in sequencing and transitions may further strengthen the material.

The content dimension obtained a weighted mean of 3.91, also interpreted as Very Satisfactory and Very Effective. This finding indicates that the developed material was aligned with learners' developmental

levels, addressed intended instructional objectives, promoted learner interest, and remained free from cultural, religious, racial, and gender biases. Although the criteria pertaining to higher cognitive skills, desirable values and traits, and safety and health notes obtained slightly lower ratings, these indicators remained within the very satisfactory range, demonstrating that the content adequately addressed these areas while still offering opportunities for enhancement.

Accuracy and up-to-datedness of information obtained the lowest weighted mean of 3.90, although it remained within the Very Satisfactory category. This finding suggests that the developed material was generally accurate, current, and free from factual, computational, and obsolete-information errors. The slightly lower ratings given to conceptual, grammatical, and typographical aspects indicate areas where additional proofreading and refinement may further improve the quality of the material.

The consistently high ratings across all four evaluation areas indicate that the developed print resources satisfied the expectations of the expert validators and met the quality standards for instructional materials. The findings demonstrate that the intervention material possesses strong content quality, effective format, sound presentation and organization, and accurate information suitable for Key Stage II non-readers.

Overall, the results reveal that the culturally sensitive intervention material is a very satisfactory and very effective instructional resource. The consistently high ratings across all evaluation areas support its acceptability and suitability for use as a print-based intervention material designed to improve the reading readiness of Key Stage II non-readers.

Problem 3. What is the pretest and posttest performance of the learners before and after the utilization of the culturally sensitive intervention material?

Table 3 Level of Pretest and Posttest Performance of the Learners

Rating Range	Pretest f	Pretest %	Posttest f	Posttest %	Descriptive Level
97%- 100%	0	0	5	20.0	Independent
90%-96%	0	0	18	72.0	Instructional
89% and below	25	100.0	2	8.0	Frustration
Total	25	100.0	25	100.0	

Table 2 reveals a substantial shift in learners' reading performance from pretest to posttest. During the pretest, all 25 learners (100.0%) were classified at the frustration level, with no learner reaching either the instructional or independent level. After the intervention, five learners (20.0%) reached the independent level, eighteen learners (72.0%) reached the instructional level, and only two learners (8.0%) remained at the frustration level. The distribution shows that 23 out of 25 learners, or 92.0%, moved out of the frustration classification after the intervention. Thus, the posttest distribution provided strong descriptive evidence of improved reading performance following the utilization of the culturally sensitive intervention material. The result was especially notable because the intervention was designed for learners initially identified as non-readers and targeted foundational reading skills through contextualized phonics-based activities. The rating ranges used in the study classified 97%–100% as Independent, 90%–96% as Instructional, and 89% and below as Frustration. The observed improvement may have been attributed to the structured and contextualized nature of the intervention, which provided learners with systematic opportunities to develop foundational reading skills through phonics-based activities while using familiar language, situations, objects, and experiences.

Problem 4. Is there a significant difference in the pretest and posttest performances of the learners after the utilization of the culturally sensitive intervention material?

Table 3 presents the results of Wilcoxon signed-rank test, which is the inferential result actually reported for the paired pretest-posttest observations. The test yielded $Z = 4.38$ with $p < .001$. The result therefore provides statistical evidence of a significant change between the pretest and posttest performance.

Table 3. Wilcoxon Signed-Rank Test Between the Pretest and Posttest Performances of the Learners

Test	Median Performance	(-) Ranks	(+) Ranks	Ties	Z-value	p-value	Decision H_0	Interpretation
Pretest	58%							
Posttest	95%	0	25	0	4.38**	<.001	Reject H_0	Significant

**significant at $p < .001$.

The results show that the median performance increased from 58% in the pretest to 95% in the posttest. There were 25 positive ranks, zero negative ranks, and zero ties. This means that every learner recorded an improvement from pretest to posttest in the paired observations used in the analysis. The obtained Z value of 4.38 and p-value of less than .001 indicate that the change was statistically significant. Hence, the null hypothesis stating that there is no significant difference between the pretest and posttest performances of the learners was rejected.

The finding provides inferential support for the descriptive improvement shown in Table 6. It also indicates that the observed shift was not limited to a small number of learners. Rather, all 25 learners showed positive change in their paired performance. The submitted data analysis explicitly reports the Wilcoxon signed-rank procedure, the Z value of 4.38, $p < .001$, and 25 positive ranks with no negative ranks or ties.

Problem 5. How do the Key Stage II non-readers react to the culturally sensitive intervention material in terms of engagement, comprehension, cultural relevance, and participation and interaction?

Tables 4 shows the results of the learners' reactions to the culturally sensitive reading intervention material in terms of engagement, comprehension, cultural relevance, and participation and interaction. The positive results suggested that the material are well aligned to the learning needs and was appropriate for the target learners.

Table 4. Key Stage II Non-readers reactions to the culturally sensitive intervention material

Particulars	Wtd mean	Verbal Description	Interpretation
Engagement			
1. I enjoy using the reading materials.	2.92	Very Much	Very Effective
2. The activities are fun to do.	3.00	Very Much	Very Effective
3. I pay attention during the lesson.	3.00	Very Much	Very Effective
4. I like the pictures and activities.	3.00	Very Much	Very Effective

5. I feel interested in reading.	2.92	Very Much	Very Effective
Overall Weighted Mean	2.97	Very Much	Very Effective

Comprehension Statements

1. I understand the words in the lesson.	2.92	Very Much	Very Effective
2. I understand the instructions given.	3.00	Very Much	Very Effective
3. I can follow the activities easily.	2.96	Very Much	Very Effective
4. I can understand what I read.	3.00	Very Much	Very Effective
5. The lesson helps me understand better.	2.64	Very Much	Very Effective
Overall Weighted Mean	2.90	Very Much	Very Effective

Cultural Relevance Statements

1. The words used are familiar to me.	3.00	Very Much	Very Effective
2. The lessons relate to my daily life.	3.00	Very Much	Very Effective
3. The materials show things I see around me.	3.00	Very Much	Very Effective
4. The examples are easy for me to understand.	3.00	Very Much	Very Effective
5. The lesson connects to my experiences.	3.00	Very Much	Very Effective
Overall Weighted Mean	3.00	Very Much	Very Effective

Participation and Interaction		Very Much	Very Effective
1. I participate in reading activities.	3.00		
2. I answer when the teacher asks questions.	3.00	Very Much	Very Effective
3. I try to read during the lesson.	3.00	Very Much	Very Effective
4. I work well with others during activities.	3.00	Very Much	Very Effective
5. I ask questions when I do not understand.	3.00	Very Much	Very Effective
Overall Weighted Mean	3.00	Very Much	Very Effective

1.00-1.49-Not at all/ Ineffective; 1.50-2.49-Not much/Effective; 2.50-3.00-Very Much/Very Effective

Table 4 presents the reactions of Key Stage II non-readers to the culturally sensitive intervention material in terms of engagement, comprehension, cultural relevance, and participation and interaction. The results reveal that all dimensions were rated *Very Much* and interpreted as *Very Effective*, with weighted means ranging from 2.90 to 3.00. These findings indicate that the learners responded positively to the intervention material and found it appropriate, meaningful, and beneficial for their reading development.

Among the dimensions, *cultural relevance* and *participation and interaction* obtained the highest overall weighted mean of 3.00. This result suggests that the learners strongly related to the content of the material, as the lessons, examples, and activities reflected their daily experiences and cultural background. Likewise, the material encouraged active participation in reading activities, classroom discussions, and collaborative learning tasks.

Engagement garnered an overall weighted mean of 2.97, which indicates that the learners enjoyed using the intervention material, found the activities interesting, and remained attentive during lessons. The use of appealing pictures, interactive activities, and culturally familiar content may have contributed to sustaining learners' interest in reading.

Meanwhile, *comprehension* obtained the lowest overall weighted mean of 2.90, although it remained within the *Very Much* and *Very Effective* categories. This finding implies that the learners were able to understand the words, instructions, and activities presented in the material and that the lessons helped improve their understanding of what they read.

Overall, the findings demonstrate that the culturally sensitive intervention material was highly accepted by the learners. The consistently high ratings across all dimensions indicate that the material was effective in promoting learner engagement, comprehension, cultural connection, and active participation. These results affirm that the intervention material was well aligned with the needs and experiences of Key Stage II non-readers and may serve as an effective resource for improving reading readiness.

Problem 6. Based on the findings of the study, how may the culturally sensitive intervention material be enhanced?

Based on the findings of the study culturally sensitive intervention material may be enhanced based on the findings. Although the overall expert and learner ratings were very positive, the results identify specific areas where refinement can make the material more responsive and sustainable.

Table 5. Proposed Enhancement Plan for the Intervention Material

Findings	Specific Action	Expected Benefit
Comprehension	Add short contextualized passages followed by oral and picture-supported questions, retelling, matching, and sequencing activities.	Strengthen understanding of text and bridge decoding to meaning.
Sequencing	Arrange activities from sound awareness to letter-sound correspondence, word building, decoding, short sentences, and simple comprehension with clear transitions.	Provide a more gradual progression from supported to independent performance.
Differentiation	Prepare additional practice sets for learners who continue to experience difficulty and extension tasks for learners who reach the instructional or independent level.	Address individual differences and prevent learners from being left behind.

Cultural contextualization	Continue using familiar objects, situations, vocabulary, and experiences while consulting local knowledge and community context when developing new examples.	Maintain relevance, familiarity, engagement, and learner connection.
Quality assurance	Conduct final proofreading and checking of concepts, grammar, captions, illustrations, and page layout before reproduction.	Minimize minor errors and maintain the Very Satisfactory accuracy rating.
Teacher support	Provide brief implementation notes, suggested pacing, scaffolding prompts, and remediation suggestions for teachers.	Promote consistent and responsive implementation.

The enhancement plan is designed to preserve the features that were strongly validated while addressing the relatively lower results. It is therefore an improvement plan rather than a replacement of the developed material. This approach is consistent with the study's ADDIE framework, particularly the use of evaluation results to guide refinement.

Conclusions

Based on the findings, the following conclusions are drawn:

1. The culturally sensitive intervention material can be systematically designed and developed through the ADDIE model while integrating sociocultural principles, contextualization, localization and culturally sensitive reading instruction.
2. The developed material met the LRMSD-based expert evaluation criteria at a Very Satisfactory level in content, format, presentation and organization, and accuracy and up-to-datedness. This indicates that the material was judged appropriate in instructional content, physical and visual format, organization, and accuracy.
3. The learners demonstrated marked improvement in reading performance after exposure to the intervention. The proportion classified at the frustration level decreased from 100.0% in the pretest to 8.0% in the posttest, while 92.0% reached either the instructional or independent level.
4. There was a statistically significant difference between the learners' pretest and posttest performance, as indicated by the Wilcoxon signed-rank test result of $Z = 4.38$ and $p < .001$. Therefore, the null hypothesis of no significant difference was rejected. This significant improvement suggested that the structured culturally sensitive reading and learning experiences helped learners develop foundational reading skills. The use of familiar language, contexts, and experiences may have increased learners' understanding, engagement, and confidence during the reading intervention. The findings therefore supported the use of the culturally sensitive reading intervention material as an appropriate approach for addressing the reading readiness needs of Key Stage 2 non-readers.
5. The learners expressed highly positive reactions to the intervention in terms of engagement, comprehension, cultural relevance, and participation and interaction. Cultural relevance and participation and interaction received the highest overall ratings of 3.00, indicating that the learners particularly appreciated the familiarity of the content and actively participated and interacted during the reading activities. This suggested that the use of culturally familiar language, experiences, and contexts helped make the intervention meaningful and encouraged learners to participate more confidently in the activities. The findings further indicated that the

culturally sensitive approach contributed to creating a supportive and engaging learning experience for the Key Stage 2 non-readers.

6. The overall findings support the use of the developed culturally sensitive intervention material as an appropriate reading intervention resource for the participating Key Stage II non-readers in the study setting. The evidence supports its acceptability and its association with improved reading performance, while further implementation and evaluation are appropriate before generalizing the findings to other populations

Recommendations

This section presents the recommendations based on the key findings of the study.

Teachers may use and continuously improve the culturally sensitive intervention material as a supplementary reading resource for Key Stage II learners with foundational reading difficulties. Activities, language, examples, illustrations, and difficulty levels may be adapted according to learners' reading abilities, cultural backgrounds, and specific learning needs.

Teachers may retain and strengthen the material's culturally relevant and phonics-based features, including familiar vocabulary, contextualized examples, culturally appropriate illustrations, phonics activities, and interactive guided practice. Qualified experts may also be consulted to review and validate the material and recommend appropriate improvements.

Additional comprehension and reading practice activities may be incorporated into succeeding versions of the material, particularly activities involving vocabulary, retelling, answering questions, and connecting texts with learners' experiences. These activities may provide further support to learners who require additional remediation in comprehension.

Learners who remain at the frustration reading level may receive intensified and individualized remediation through small-group or one-on-one instruction, repeated practice, and targeted activities in phonemic awareness, decoding, word recognition, and comprehension. Learner reactions may also be considered in refining succeeding intervention activities.

School administrators and future researchers may support further validation and improvement of the material by providing resources, technical assistance, teacher collaboration, and professional development. Further expert review, field testing, and implementation with larger and more diverse groups of learners may be conducted to determine the material's applicability and effectiveness across different cultural and linguistic contexts.

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