

Enhancing the Reading Acumen of Manobo Junior High School Students Through Linguistically Relevant Literature

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ABSTRACT

This study focused on the development, validation, and evaluation of *PAGLAYANG: Discovering the Ancestral Trail toward English Reading Success*, a localized supplementary reading booklet designed for Grade 7 Manobo learners at Rajah Cabungsu Integrated School in Lingig, Surigao del Sur. Using a Design and Development Research (DDR) framework with a developmental-evaluative approach, the study involved 23 Grade 7 Manobo learners, three instructional practitioners, and five expert validators selected through complete enumeration, purposive sampling, and criterion-based sampling techniques. Data were collected using adapted and researcher-developed instruments, including the Philippine Informal Reading Inventory (Phil-IRI), validation and usability questionnaires, and interview guides. Quantitative data were analyzed through weighted mean, standard deviation, and independent-samples t-test, while qualitative responses were examined using reflexive thematic analysis.

Results indicated that reading comprehension emerged as the learners' most pressing reading concern. The developed booklet demonstrated strong alignment with the Revised K to 10 Curriculum ($M = 4.900$) and received very high validation ratings across content, instructional design, language clarity, technical quality, and suitability for the intended learners ($M = 4.905$). Both teachers and students likewise rated the material as highly relevant and usable ($M = 4.880$). Statistical analysis revealed no significant differences in the evaluations provided by the respondent groups. Qualitative findings further showed that the booklet enhanced learners' engagement with reading, supported better text comprehension, and fostered a stronger appreciation of their cultural heritage. Overall, the findings suggest that culturally responsive and linguistically appropriate reading materials can contribute meaningfully to reading development while reinforcing the cultural identity of indigenous learners.

Keywords: Design and Development Research, Manobo learners, reading comprehension, culturally responsive pedagogy, supplementary reading material, indigenous education

INTRODUCTION

Reading is an essential skill that helps learners succeed in school and in everyday life. It serves as the foundation for learning across different subjects and supports lifelong learning. Despite its importance, many indigenous learners continue to experience difficulties in reading, especially when the instructional materials used in schools do not reflect their language, culture, and daily experiences. When learners are exposed to reading materials that contain unfamiliar language and cultural references, they often find it difficult to understand the text, which may affect their confidence, participation, and overall learning experience (Alsheikh et al., 2022). In contrast, studies have shown that learners perform better when instructional materials are connected to their native language and cultural background because these materials help them understand lessons more easily and meaningfully (Tadeo, 2026).

Research from different countries has consistently emphasized the importance of culturally and linguistically responsive instructional materials in improving reading comprehension among indigenous and minority learners

(Gautam, 2025). Many learners struggle when reading materials are presented only in a dominant national or foreign language, without consideration of their linguistic and cultural backgrounds. This situation often creates barriers to comprehension and limits learners' ability to make sense of what they read (Mwisongo, 2025). Studies further suggest that learners acquire a second language more effectively when their first language and cultural experiences are used as support in the learning process (Tseng, 2025).

In the Philippines, culturally responsive education is promoted through Culturally Responsive Pedagogy (CRP) and the Department of Education's Indigenous Peoples Education (IPEd) Curriculum Framework. These initiatives encourage the development of learning resources that reflect the culture, language, and experiences of indigenous communities. Likewise, Republic Act No. 8371, or the Indigenous Peoples' Rights Act of 1997, recognizes the right of indigenous peoples to culturally appropriate education. This mandate is further supported by DepEd Order No. 32, s. 2015, which provides guidelines for implementing the IPEd Program, and DepEd Order No. 76, s. 2011, which sets quality standards for learning resources through the Learning Resource Management and Development System (LRMDS).

Despite these policies, many indigenous schools still have limited access to localized and culturally relevant reading materials. As a result, teachers often rely on standard English resources that may not reflect the experiences and realities of indigenous learners (Sanchez & Dagondon, 2025). This mismatch between learners and reading materials creates challenges in comprehension and engagement (Lentejas, 2025). The problem is also reflected in national literacy data. The problem is also reflected in national literacy data. The EDCOM II Year Three Report (2026) revealed that more than 75 percent of Filipino learners continue to perform below expected levels of reading proficiency, highlighting an ongoing literacy concern in the country.

This situation is evident among the Grade 7 Manobo learners of Rajah Cabunguan Integrated School (RCIS). Results of the Philippine Informal Reading Inventory (Phil-IRI) conducted during the 2025-2026 school year showed that 11 out of 23 Manobo learners were classified under the Frustration reading level. Classroom observations further revealed difficulties in word recognition, reading comprehension, and oral expression. These challenges may be linked to the lack of culturally relevant reading materials that reflect the learners' language, identity, and lived experiences.

Although previous studies have highlighted the benefits of contextualized learning materials (Gautam, 2025; Young, 2025), limited research has focused on the development and validation of multilingual reading materials specifically designed for Manobo learners in the Caraga Region. Many existing reading interventions use general approaches that do not fully address the cultural and linguistic needs of indigenous students (Lentejas & Tong, 2025). This gap highlights the need for instructional materials that support literacy development while preserving indigenous culture and identity.

To address this need, the present study developed *PAGLAYANG: Discovering the Ancestral Trail toward English Reading Success*, a localized supplementary reading booklet for Grade 7 Manobo learners. Developed using the Design and Development Research (DDR) framework, the material integrates Indigenous Knowledge Systems and Practices (IKSP), local narratives, and multilingual support to improve reading comprehension and strengthen cultural pride among learners.

The study was guided by several theories related to reading comprehension, language learning, and culturally responsive education. Schema Theory (Anderson & Pearson, 1984) explains that learners understand texts more effectively when new information is connected to their prior knowledge and experiences. Cummins' (1981) Linguistic Interdependence Hypothesis suggests that skills developed in a learner's first language can support second-language learning. The study also draws on Gay's (2010) Culturally Responsive Pedagogy, which emphasizes incorporating learners' cultural identities into instruction. In addition, Vygotsky's (1978) Social Constructivist Theory highlights the role of guidance and support in learning, while Krashen's (1982) Second Language Acquisition Theory emphasizes the importance of understandable language input and a positive learning environment. Together, these theories support the development of culturally relevant instructional materials that promote both reading development and cultural identity among indigenous learners.

Research Questions

This study aimed to develop, validate, and evaluate *PAGLAYANG: Discovering the Ancestral Trail toward English Reading Success*, a culturally and linguistically responsive supplementary reading material for Grade 7 Manobo learners of Rajah Cabungsu Integrated School.

Specifically, the study sought to answer the following questions:

1. What are the competencies in reading that the instructional material addressed for the target learners, as measured with the following indicators:
 - 1.1 Word Recognition Needs
 - 1.2 Reading Fluency Needs
 - 1.3 Comprehension Needs
 - 1.4 Miscue Analysis?
2. To what extent does the developed instructional material align with the prescribed Revised Kto10 Curriculum learning standards in terms of:
 - 2.1 Coverage of the Revised Kto10 Curriculum Learning Competencies;
 - 2.2 Alignment with Cognitive Process Dimensions;
 - 2.3 Adherence to the Content Standards and Performance Standards;
 - 2.4 Integration of DepEd's Core Values and Pedagogical Approaches; and
 - 2.5 Accuracy, Appropriateness, and Cultural Relevance?
3. What is the level of validity of the developed instructional material, as evaluated by the Expert Group and Practitioner Group, in terms of:
 - 3.1 Content Accuracy and Relevance;
 - 3.2 Instructional Design and Sequencing;
 - 3.3 Language and Clarity;
 - 3.4 Technical Design and Usability; and
 - 3.5 Appropriateness for the Target Learners?
4. What is the perceived Relevance encompassing usability, practicality, and cultural Relevance of the instructional material as assessed by the Student End-User Group?
 - 4.1 Ease of Use;
 - 4.2 Engagement Level;
 - 4.3 Clarity of Instructions;
 - 4.4 Integration of DepEd's Core Values and Pedagogical Approaches; and

4.5 Accuracy, Appropriateness, and Cultural Relevance?

5. Is there a significant difference in end-users' perceptions of the material's usability?
6. Is there a significant difference in the perceived level of validity as evaluated by the different respondent groups?
7. What insights do stakeholders provide on the linguistic Relevance of literature that should be considered in the development of the instructional materials?
8. What is the final, refined, and validated instructional material ready for institutional adoption?

Hypotheses

To provide a statistical basis for answering the inferential questions presented in the Statement of the Problem, particularly SOP 5 and SOP 6, the study tested the following null hypotheses at the 0.05 level of significance:

H₀₁: There is no significant difference in the perceived usability and practicality of the instructional material between the Grade 7 Manobo students and the Practitioner Group (English Teacher, School Head, and the ALS Teacher).

H₀₂: There is no significant difference in the perceived level of validity (content, design, and language) between the Expert Validation Panel and the Educator Group.

METHODOLOGY

This study employed a Design and Development Research (DDR) approach using a developmental-evaluative design. The research focused on the development, validation, and evaluation of *PAGLAYANG: Discovering the Ancestral Trail toward English Reading Success*, a supplementary reading booklet designed for Grade 7 Manobo learners.

The study was conducted at Rajah Cabunguan Integrated School in Lingig, Surigao del Sur, Philippines. The school serves a significant number of indigenous Manobo learners and was identified as an appropriate setting for the study because the Beginning of School Year (BOSY) Philippine Informal Reading Inventory (Phil-IRI) results indicated notable reading difficulties among the learners. Permission to conduct and publish the study was obtained from the appropriate school and the Department of Education authorities.

The participants comprised 31 respondents, divided into three groups. The first group included 23 Grade 7 Manobo learners who served as the student end-users of the material. Complete enumeration was used since all officially enrolled Grade 7 Manobo learners were included in the study. The second group consisted of three instructional practitioners, namely the English teacher, Alternative Learning System (ALS) teacher, and school head, who were selected through purposive sampling based on their experience in working with indigenous learners. The third group was composed of five expert validators selected through criterion sampling. These experts included an Education Program Supervisor, an Indigenous Peoples Education (IPed) Reading Coordinator, a Master Teacher, a literature specialist, and the Municipal Indigenous Peoples Mandatory Representative (IPMR).

Table 1. Distribution of Respondents

Respondents/Groups	Instrument/SOPs Involved	Number (N)	Key Informants
Target Learners	Needs Assessment Tool and End-User Perception Tool	23	13
Practitioner Group	Needs Assessment Tool, IM Validation Tool, End-User Perception Tool, and Qualitative Feedback (Part B)	3	3
Expert Validation Panel	IM Validation Tool, Qualitative Feedback (Part B), and Cultural Validation Form	5	5
Total		31	21

Several instruments were used to gather the necessary data. A needs assessment protocol adapted from the Philippine Informal Reading Inventory (Phil-IRI) was used to determine the learners' reading needs. The instrument was translated into the Manobo language and reviewed by tribal elders and a language specialist to ensure clarity and cultural appropriateness.

The developed instructional material was evaluated using an Instructional Material Validation Scale adapted from the Learning Resource Management and Development System (LRMDS) framework. The instrument consisted of 20 items measured using a five-point Likert scale ranging from 1 (Strongly Disagree/Not Aligned) to 5 (Strongly Agree/Highly Aligned). It assessed curriculum alignment, instructional design, language, and cultural relevance.

To determine usability and relevance, a researcher-made User Perception Scale consisting of 25 items was administered to the practitioners and student end-users. The instrument measured ease of use, engagement, clarity, instructional appropriateness, and cultural relevance using a five-point Likert scale. Pilot testing was conducted with 18 non-participant learners, yielding a Cronbach's alpha of 0.83, indicating good reliability.

A semi-structured interview guide was also used to gather qualitative data from selected participants. The interview questions were validated by an expert in qualitative and ethnographic research to ensure that they were appropriate for capturing the learners' experiences, perceptions, and cultural insights regarding the developed material.

Data collection followed four phases. First, a needs assessment was conducted to identify the target learners' reading difficulties. Second, the instructional material was developed through the contextualization and translation of selected Grade 7 English literary texts from English to Bisaya to Manobo. Third, the material underwent expert validation and classroom implementation through five 45-minute instructional sessions. Finally, revisions were made based on the feedback and evaluation results to produce the final version of the booklet.

The study strictly observed ethical standards. Approval was secured from the Manobo Council of Elders through a Tribal Resolution of Consent and from the Municipal Indigenous Peoples Mandatory Representative (IPMR). Permission was likewise obtained from the Department of Education and school authorities. Parental consent, student assent, and participant consent forms were secured before data collection. To protect participants' privacy, all data were treated confidentially and coded using anonymous identifiers in accordance with the Data Privacy Act of 2012.

Quantitative data were analyzed using weighted mean and standard deviation to determine the level of reading needs, curriculum alignment, validity, and usability of the instructional material. An independent-samples t-test was used to determine significant differences in the perceptions of the respondent groups at the 0.05 level of significance. Qualitative data gathered from interviews and open-ended responses were analyzed using Braun and Clarke's (2022) Reflexive Thematic Analysis to identify recurring themes and patterns from the participants' experiences.

The study was limited to the development, validation, and evaluation of the PAGLAYANG supplementary reading booklet among Grade 7 Manobo learners in one public secondary school in Surigao del Sur. The findings are therefore limited to the study's context and may not be directly generalized to other indigenous groups or educational settings. Furthermore, the study focused on immediate usability and validation outcomes and did not examine the material's long-term effects on reading achievement.

RESULTS

Reading Competency Needs of Grade 7 Manobo Learners

The baseline assessment conducted using the adapted Phil-IRI procedures revealed several areas in which Grade 7 Manobo learners require instructional support. As presented in Table 2, the learners demonstrated challenges

across all four reading indicators examined. Among these, deeper passage comprehension had the highest mean score ($M = 4.310$), indicating it is the most pressing literacy concern requiring immediate intervention. In contrast, word recognition and decoding registered the lowest mean score ($M = 3.322$), suggesting that while learners still experience difficulties in basic reading mechanics, these concerns are less severe than their comprehension-related challenges.

Overall, the grand mean of 3.735 suggests that reading difficulties among the participants were moderately evident. The findings suggest that learners may be able to recognize words and read passages aloud yet still struggle to construct meaning from what they read. This highlights the need for instructional materials that go beyond decoding exercises and focus on developing higher-order comprehension skills through culturally relevant, meaningful learning experiences.

Table 2. Reading Competencies Needs of Grade 7 Manobo Students

Indicators	Practitioners		Students		Grand Mean	Overall Adjectival Rating
	Mean	Adjectival Rating	Mean	Adjectival Rating		
Word Recognition Needs	3.40	Moderately Evident	3.24	Evident	3.322	Evident
Reading Fluency Needs	3.93	Moderately Evident	3.47	Evident	3.702	Moderately Evident
Comprehension Needs	4.53	Highly Evident	4.09	Moderately Evident	4.310	Highly Evident
Miscue Analysis	4.13	Moderately Evident	3.08	Evident	3.606	Moderately Evident
Overall Mean	4.00	Moderately Evident	3.47	Moderately Evident	3.735	Moderately Evident

Extent of Alignment of the Developed Instructional Material with the Prescribed Revised K-to-10 Curriculum Learning Standards

The developed instructional material was evaluated for alignment with the Revised K to 10 Curriculum. Results showed that both expert validators and classroom practitioners rated all alignment indicators very positively. As shown in Table 3, the material received an overall mean of 4.900, interpreted as Highly Aligned.

Among the indicators, the integration of DepEd core values received the highest rating ($M = 4.950$), reflecting the material's strong emphasis on character formation and values education. Meanwhile, coverage of learning competencies received the lowest rating (though still very high), at $M = 4.860$. The consistency of the ratings across evaluator groups indicates that the booklet successfully addresses curriculum requirements while maintaining its culturally responsive orientation.

Table 3. Extent of Alignment of the Developed IMs with the Revised Kto10 Curriculum Standards

Indicators	Experts		Practitioners		Grand Mean	Overall Adjectival Rating
	Mean	Adjectival Rating	Mean	Adjectival Rating		
Coverage of DepEd Curriculum Learning Competencies	4.76	Highly Aligned	4.87	Highly Aligned	4.814	Highly Aligned
Alignment with Cognitive Process Dimensions	4.96	Highly Aligned	4.87	Highly Aligned	4.914	Highly Aligned

Adherence to Content Standards	4.92	Highly Aligned	4.87	Highly Aligned	4.894	Highly Aligned
Integration of DepEd Core Values	4.96	Highly Aligned	5.00	Highly Aligned	4.980	Highly Aligned
Accuracy, Appropriateness, & Cultural Relevance	4.80	Highly Aligned	5.00	Highly Aligned	4.900	Highly Aligned
Overall Mean	4.88	Highly Aligned	4.92	Highly Aligned	4.900	Highly Aligned

Validity of the Developed Instructional Material

The validity assessment revealed that the PAGLAYANG booklet met established standards for instructional quality. Table 4 shows that all evaluation domains received ratings within the Highly Aligned/Valid range, resulting in an overall mean of 4.905.

Instructional design and sequencing emerged as the strongest aspect of the material ($M = 4.940$). Evaluators noted that the lessons progressed logically and provided adequate scaffolding for learners. Language clarity and readability received the lowest rating ($M = 4.870$), although this score still reflects a very favorable evaluation. Overall, the findings indicate that the material possesses strong content validity and is suitable for classroom implementation.

Table 4. Perceived Validity of the Instructional Materials

Indicators	Experts		Practitioners		Grand Mean	Overall Adjectival Rating
	Mean	Adjectival Rating	Mean	Adjectival Rating		
Content Accuracy & Relevance	4.84	Highly Aligned	4.93	Highly Aligned	4.887	Highly Aligned
Instructional Design & Sequencing	4.92	Highly Aligned	5.00	Highly Aligned	4.960	Highly Aligned
Language & Clarity	4.68	Highly Aligned	5.00	Highly Aligned	4.840	Highly Aligned
Technical Design & Usability	4.80	Highly Aligned	5.00	Highly Aligned	4.900	Highly Aligned
Appropriateness for the Target Learners	4.88	Highly Aligned	5.00	Highly Aligned	4.940	Highly Aligned
Overall Mean	4.824	Highly Aligned	4.987	Highly Aligned	4.905	Highly Aligned

Perceived Relevance Encompassing Usability, Practicality, and Cultural Relevance of the Instructional Material

Following classroom implementation, both teachers and learners assessed the usability and relevance of the PAGLAYANG booklet. Results indicate that the material was highly accepted by its intended users, as reflected in the overall mean score of 4.880.

The highest rating was obtained by accuracy and cultural relevance ($M = 4.940$), suggesting that learners found the content meaningful and reflective of their lived experiences. On the other hand, clarity of instructional directions received the lowest rating ($M = 4.820$), indicating a possible area for further enhancement. Despite this, all indicators remained within the Highly Relevant category, demonstrating the material's effectiveness as a culturally responsive reading resource.

Table 5. End-User Perception on Usability of the Instructional Material

Indicators	Practitioners		Students		Grand Mean	Overall Adjectival Rating
	Mean	Adjectival Rating	Mean	Adjectival Rating		
Ease of Use	4.87	Highly Relevant	4.90	Highly Relevant	4.886	Highly Relevant
Engagement Level	4.87	Highly Relevant	4.91	Highly Relevant	4.890	Highly Relevant
Clarity of Instruction	4.80	Highly Relevant	4.84	Highly Relevant	4.818	Highly Relevant
Integration of DepEd Core Values	4.87	Highly Relevant	4.91	Highly Relevant	4.890	Highly Relevant
Accuracy, Appropriateness & Cultural Relevance	4.93	Highly Relevant	4.90	Highly Relevant	4.919	Highly Relevant
Overall Mean	4.867	Highly Relevant	4.894	Highly Relevant	4.880	Highly Relevant

Evaluation of the Significant Difference in the Perception of End-Users Regarding the Material's Perceived Usability

Independent-samples t-tests were conducted to determine whether significant differences existed between the usability ratings provided by classroom practitioners ($n = 3$) and student end-users ($n = 23$). The results are presented in Table 6.

As shown in Table 6, all computed p-values were greater than the \$0.05\$ level of significance. This indicates that no statistically significant differences existed between the ratings of classroom practitioners and student end-users across the five usability indicators assessed.

Specifically, Ease of Use ($t = 0.210$, $p = 0.852$), Engagement Level ($t = 0.330$, $p = 0.771$), Clarity of Instruction ($t = 0.170$, $p = 0.880$), Integration of DepEd Core Values ($t = 0.340$, $p = 0.767$), and Accuracy, Appropriateness, and Cultural Relevance ($t = 0.370$, $p = 0.736$) all yielded non-significant results. Consequently, the null hypothesis was not rejected, suggesting that both groups shared similar perceptions regarding the usability of the *PAGLAYANG* booklet.

Table 6. Test of Significant Difference in the Usability Perceptions Between End-User Groups

Sources of Variation	Computed +	P-value	Decision	Conclusion
Ease of Use	0.210	0.852	Failed to reject Ho	Not Significant
Engagement Level	0.330	0.771	Failed to reject Ho	Not Significant
Clarity of Instruction	0.170	0.88	Failed to reject Ho	Not Significant
Integration of DepEd Core Values	0.340	0.767	Failed to reject Ho	Not Significant
Accuracy, Appropriateness & Cultural Relevance	0.370	0.736	Failed to reject Ho	Not Significant

Evaluation of the Significant Difference in the Perceived Level of Validity

Independent-samples t-tests were conducted to determine whether significant differences existed between the usability ratings provided by classroom practitioners (n = 3) and student end-users (n = 23). The results are presented in Table 7.

As shown in Table 7, all computed p-values were greater than the 0.05 level of significance. This indicates that no statistically significant differences existed between the ratings of classroom practitioners and student end-users across the five usability indicators assessed.

Specifically, Ease of Use (t = 0.210, p = 0.852), Engagement Level (t = 0.330, p = 0.771), Clarity of Instruction (t = 0.170, p = 0.880), Integration of DepEd Core Values (t = 0.340, p = 0.767), and Accuracy, Appropriateness, and Cultural Relevance (t = 0.370, p = 0.736) all yielded non-significant results. Consequently, the null hypothesis was not rejected, suggesting that both groups shared similar perceptions regarding the usability of the PAGLAYANG booklet.

Table 7. Test of the Significant Difference in the Perceived Level of IM Validity

Sources of Variation	Computed +	P-value	Decision	Conclusion
Content Accuracy & Relevance	0.930	0.394	Failed to reject Ho	Not Significant
Instructional Design & Sequencing	0.750	0.531	Failed to reject Ho	Not Significant
Language & Clarity	0.030	0.976	Failed to reject Ho	Not Significant
Technical Design & Usability	0.370	0.744	Failed to reject Ho	Not Significant
Appropriateness for the Target Learners	0.620	0.597	Failed to reject Ho	Not Significant

Qualitative Themes on Stakeholder Insights and Learner Identity

To provide deep context for the quantitative metrics, qualitative data gathered from student semi-structured interviews, classroom practitioner logs, and expert validation panel feedback were subjected to reflexive thematic analysis. This process revealed four major themes detailing the pedagogical, linguistic, and structural performance of the developed instructional material.

Theme 1: Cultural Mirroring and Identity Affirmation Through Localized Textual Representation

The responses gathered from the students, practitioners, and expert validators revealed a common appreciation for the way the developed instructional material reflected the culture, traditions, and lived experiences of the Manobo community. Participants noted that the inclusion of familiar cultural elements made the reading material more meaningful and relatable. For the student respondents, reading texts that reflected their own experiences and heritage helped them develop a deeper appreciation of their identity and culture. Instead of viewing reading solely as an academic requirement, they began to see it as an opportunity to learn more about their roots and take pride in their community. This perspective was evident in the statement shared by Student Participant 4 (S4):

"Tungod sun nu mga pang-osip mas masabutan ko nu importantihay lagbuy sii ita kultura, duw kinahanglan ta lagbuy nu higugmaon duw ipanghambog sii ita tribo o kultura." (Yes, because through the questions we were asked, I understood more deeply that our culture is truly important and that we should love it and proudly uphold our tribe and heritage.)

The same appreciation was observed among the practitioner participants, who highlighted the material's ability to present indigenous culture in a respectful and authentic manner. They emphasized that the inclusion of local narratives, cultural practices, and references to the ancestral domain strengthened the relevance of the material for Manobo learners. According to them, the lessons not only supported literacy development but also encouraged learners to value their culture and understand their role in preserving it. Their observations are reflected in the following statements:

"The cultural elements, language use, and literary narratives are presented authentically and respectfully, preserving the integrity of indigenous knowledge while supporting meaningful knowledge... The presented SLM material demonstrates a strong connection to IKSP. It presented authentic Manobo experiences, traditions, and worldview. The content shows a meaningful connection to learners." - Practitioner 1 (P1)

"The material displays material elements that indicate its relevance to culture. The use of 'Rajah Cabungsoan, Paglayang, Manobo Translation, and connecting learners on protecting their ancestral domain.'" - Practitioner 2 (P2)

Similarly, the expert validators recognized the importance of integrating cultural elements into the instructional material. They noted that the representation of Manobo traditions, language, and identity allowed learners to see themselves reflected in the lessons, thereby making learning more engaging and meaningful. The experts also stressed the need to maintain accuracy and respect when presenting Indigenous Knowledge Systems and Practices (IKSP) to ensure that cultural traditions are preserved and correctly represented. These insights were expressed in the following remarks:

"By incorporating elements that reflect the traditions, language, and identity of the Manobo community, the material allows learners to see their culture represented in the lesson. This approach strengthens learners' sense of identity, promotes cultural appreciation, and makes the learning experience more meaningful and relatable." - Expert Panelist 4 (EP4)

"Nakita ang respeto sa IKSP ug makadasig sa garbo sa pagka-manobo. Sigoroha nga ang matag term nga gigamit dili makahatag og sayop nga interpretasyon sa atong tradisyon." (Respect for IKSP is evident and it encourages the pride of being a Manobo. Ensure that each term used does not give a wrong interpretation of our tradition.) - Indigenous Peoples Mandatory Representative Expert (IPMR-E)

Theme 2: Linguistic Bridging for Cognitive Accessibility of Complex Target-Language Literacy Concepts

Participants' responses revealed the important role of the Manobo language in helping learners understand English literary texts. Across the interviews, students expressed that the inclusion of Manobo translations made reading activities less difficult and more approachable. Having access to their mother tongue enabled them to understand unfamiliar words and ideas more easily, thereby increasing their confidence when reading longer passages. The participants also shared that they could relate more to the stories because the content reflected their own experiences and cultural backgrounds. These insights were evident in the following responses:

"Lagbuy ko gayod nagustohan sun mangka mataas nu story tungod kay muy manobo translation, mas dali ko na ug kasabutan. Tapos angod tu muy pagka-parihas tu mga panginabuhi tu mga manobo din Rajah Cabungsoan." (I really liked those long stories because they have a Manobo translation, which makes them easier for me to understand. Also, they seem to reflect the way of life of the Manobo here in Rajah Cabungsoan.) - Student Participant 1 (S1)

"Para kanakun, mas masayun tu sabuton kan minanobo kay iyan kan naanadan ku." (For me, Minanobo is really easier to understand because it is what I am used to.) - Student Participant 2 (S2)

The practitioners likewise recognized the value of integrating the mother tongue into the reading material. They observed that presenting Manobo and English side by side helped learners understand the content without losing the meaning of the text. According to them, the use of translations and contextualized stories made language learning more meaningful and accessible. These observations are reflected in the following statements:

"The content is factually accurate and maintains high fidelity to the original English literary sources while ensuring the Manobo translation is linguistically appropriate. It effectively balances linguistic knowledge with literary skills." - Practitioner 1 (P1)

"Clear presentation of Manobo terms with English translations. Contextualized stories make language learning meaningful." - Practitioner 3 (P3)

The expert validators shared similar views regarding the effectiveness of the bilingual presentation. They noted that the inclusion of Manobo translations enhanced comprehension while preserving the learners' linguistic and cultural identity. Moreover, they emphasized that the material remained faithful to the original literary texts while presenting them in a way that was more understandable to Manobo learners. Their observations are reflected in the following comments:

"The inclusion of Manobo translation enhances cultural relevance and helps learners better understand the lesson while preserving local language and identity. The material maintains accurate and reliable information."
- Expert Panelist 2 (EP2)

"The material maintains fidelity to the original literary source while contextualizing its meaning for Manobo learners. Interpretations and examples are culturally grounded and pedagogically sound. The bilingual presentation supports comprehension without distorting the literary message." - Expert Panelist 3 (EP3)

Theme 3: Instructional Scaffolding and Culturally Grounded Higher-Order Thinking Skills (HOTS)

Participants' responses revealed that the developed material effectively supported the development of higher-order thinking skills by presenting learning activities in a gradual and manageable manner. Students shared that they found the activities engaging because they encouraged them to think critically about situations that were familiar to their daily lives and cultural experiences. Rather than simply recalling information, the learners were challenged to analyze situations, make decisions, and reflect on possible outcomes. The use of culturally relevant scenarios appeared to make these thinking tasks more meaningful and easier to understand. This was evident in the response of Student Participant 5 (S5):

"Sun 'The Scout's Dilemma: Which burden will you carry? Quarter 2 Week 1. A' kay ug makahuna-huna ka gayod tu matarong duw nukoy tu ikow ug pillion, sapi o pagkuon para kabuhi ki." ("The Scout's Dilemma: Which burden will you carry? Quarter 2 Week 1. A" really makes you think about what is better to choose, money or food, to survive.)

The practitioner participants likewise observed that the organization of the lessons and activities helped learners gradually develop more advanced thinking skills. According to them, the lessons followed a logical sequence that allowed students to build understanding step by step, making independent learning more manageable. They also noted that the activities encouraged learners to move beyond memorization and engage in reflection, analysis, and interpretation. Their observations are reflected in the following statements:

"The lessons follow a logical, simple-to-complex progression that is ideal for independent study, which is crucial for learners in the ALS context. The tasks are validly designed to stimulate Higher-Order Thinking Skills (HOTS). The instructional flow is seamless and supports the development stage of the learners." - Practitioner 1 (P1)

"The flow of lessons supports the gradual development of reading comprehension and literary analysis. Activities encourage reflective and critical thinking." -Practitioner 3 (P3)

Similarly, the expert validators recognized the instructional design's effectiveness in promoting higher-order thinking skills while maintaining alignment with curriculum standards. They emphasized that the activities were organized to increase in complexity gradually and to encourage learners to engage in analysis, evaluation, and reflection. These observations are reflected in the following comments:

"Lessons follow a logical and coherent sequence from basic comprehension to higher-order thinking skills (HOTS). Activities gradually increase in complexity and promote critical and creative thinking." - Expert Panelist 3 (EP3)

"Higher-Order Thinking Skills (HOTS) are effectively integrated through tasks that encourage analysis, evaluation, and reflection. The sequencing of activities is clear, allowing learners to engage meaningfully and achieve the intended learning outcomes." - Expert Panelist 2 (EP2)

Theme 4: Technical Fidelity and User-Experience Refinement for Quality Assurance and Usability Optimization

The fourth qualitative theme highlights the importance of technical quality, visual organization, and user experience in the effectiveness of the developed trilingual instructional material. The findings revealed that, aside from culturally relevant content, the learners and evaluators also valued the material's physical presentation and readability. Student participants shared that the illustrations, organized layout, and overall presentation helped them better understand the stories and maintain their interest as they read. During the interviews, the learners also showed awareness of how assessment design could influence their answering behavior, particularly in multiple-choice activities. Student Participant 6 (S6) explained:

"Para din kanak, usabon dapat sun multiple choice nu answeranan nu dapat parihusun ra kahaba, tama man nu answer or mali. Kay yan kan tig intungan tu mga mag-eskwelahay, duw nukuy tu mahaba, iyan kan ug answer dan." (For me, the multiple-choice items should be revised. The choices should be of equal length, whether correct or incorrect, because students tend to choose the longer option as the answer.)

The classroom practitioners also observed that the material was visually appealing, easy to read, and appropriate for the learners' age level. They noted that the illustrations and layout supported student engagement and independent reading. However, they also suggested several improvements to strengthen readability further and reduce visual strain during classroom use. These recommendations were reflected in their evaluation comments:

"The layout is appealing and age-appropriate, with legible font styles that support ease of reading. Visuals are well-integrated and enhance the learner's engagement with the text. The physical organization is highly practical for classroom and field use." - Practitioner 1 (P1)

"Clear layout, readable font, and visually engaging illustrations. Increase spacing between some text sections for improved readability." - Practitioner 3 (P3)

Similarly, the Expert Validation Panel emphasized the need for consistency in formatting, spacing, and font styles to ensure that the material would meet formal instructional standards and remain suitable for institutional use. Their comments focused on improving the overall technical presentation of the module:

"Consider making the formatting, font sizes, and illustrations more consistent throughout the material to improve readability and overall user experience (some of the fonts are Arial, Century Gothic, etc.)." - Expert Panelist 2 (EP2)

"Improve spacing consistency and alignment in some sections for better visual balance. Please use one font style, 1.5 or 2 spacing. Standardize formatting of headings and subheadings throughout the material." - Expert Panelist 3 (EP3)

DISCUSSION

The baseline findings revealed that comprehension difficulties remain a significant challenge among Grade 7 Manobo learners. Although learners displayed relatively better performance in word recognition and decoding, their difficulty in understanding and interpreting texts suggests that reading challenges extend beyond basic literacy skills. This finding supports the view that comprehension is influenced not only by linguistic ability but also by the learner's capacity to connect textual information with prior knowledge and lived experiences.

The limited cultural Relevance of many conventional reading materials may explain the prominence of comprehension-related difficulties. When learners encounter texts that are disconnected from their social and cultural realities, meaning-making becomes more difficult. This observation supports the propositions of Schema Theory, which emphasizes the role of prior knowledge in facilitating comprehension. Learners are more likely to understand and engage with texts when the content reflects familiar experiences and cultural contexts.

The strong alignment ratings for the PAGLAYANG booklet further demonstrate that culturally responsive instructional materials can effectively meet curriculum requirements while remaining meaningful to indigenous learners. The findings challenge the assumption that localization compromises academic rigor. Instead, they suggest that integrating indigenous knowledge and local experiences can enhance curriculum delivery without sacrificing educational standards. This observation is consistent with the principles of Culturally Responsive Pedagogy, which advocate incorporating learners' cultural backgrounds as a foundation for effective instruction.

Similarly, the high usability and relevance ratings highlight the positive impact of contextualized learning materials on learner engagement. Participants reported that the stories and activities resonated with their experiences, making reading more enjoyable and less intimidating. These findings support Krashen's Affective Filter Hypothesis, which suggests that learners acquire language more effectively when anxiety is minimized and motivation is enhanced. By validating learners' identities and experiences, the PAGLAYANG booklet appears to create a more supportive environment for literacy development.

Finally, the absence of significant differences among the evaluations by experts, practitioners, and learners suggests a shared perception of the instructional material's quality. The consistency of these ratings strengthens the credibility of the findings and indicates that the booklet successfully balances theoretical soundness, practical classroom applicability, and cultural Relevance. Collectively, the results affirm the potential of culturally grounded instructional materials to address literacy challenges while promoting the preservation and appreciation of indigenous identity.

CONCLUSIONS

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

The results revealed that reading comprehension was the most evident reading-competency need among Grade 7 Manobo learners. This finding suggests the need for instructional materials that support the development of comprehension through learning experiences responsive to learners' linguistic and cultural contexts.

The qualitative findings further indicated the importance of incorporating the local Manobo language and cultural experiences into instructional materials. The integration of familiar language, cultural references, and Indigenous Knowledge Systems and Practices (IKSP) contributed to the relevance and accessibility of the developed reading resource for the target learners.

The developed PAGLAYANG booklet demonstrated a high level of alignment with the Revised K to 10 Curriculum standards. This indicates that localized and culturally responsive instructional materials can be developed without compromising curriculum requirements, learning competencies, content standards, performance standards, and core values prescribed by the Department of Education.

The validity evaluation conducted by the expert validators and the practitioner group showed that the instructional material met established standards in content accuracy and Relevance, instructional design and sequencing, language and clarity, technical design and usability, and appropriateness for the target learners. These findings indicate that the developed material is suitable for classroom implementation.

The student end-users likewise perceived the material as highly relevant, usable, and practical. The findings suggest that the booklet's bilingual and culturally responsive features contributed to learner engagement and supported meaningful participation in reading activities.

The results further revealed no significant difference between the perceptions of classroom practitioners and student end-users regarding the instructional material's usability. This indicates a shared positive evaluation of the material's usefulness and practicality among its intended users.

Similarly, no significant difference was found between the expert validators' and the practitioner group's evaluations of the instructional material's validity. The consistency of these evaluations strengthens the credibility of the validation results and supports the quality of the developed resource.

Finally, the development, validation, and evaluation processes resulted in a refined instructional material that is culturally responsive, linguistically relevant, and academically sound. The PAGLAYANG booklet may serve as a supplementary reading resource to support reading development and promote the appreciation and preservation of the Manobo language, culture, and identity among Grade 7 learners.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are offered:

For Classroom Teachers and Students

Grade 7 Manobo Learners. The validated PAGLAYANG booklet may be utilized both during classroom instruction and in independent reading activities. Through its bilingual presentation in Manobo and English, learners are provided with reading support that can help lessen difficulties in understanding texts. The inclusion of familiar stories, local experiences, and cultural themes may further encourage learners to develop their reading comprehension while deepening their appreciation of their cultural identity and heritage.

Junior High School English Teachers. English teachers may integrate the PAGLAYANG booklet as a supplementary reading resource in their daily instruction. The structured progression of lessons and activities provides opportunities for learners to engage more actively in reading tasks. The use of contextualized examples and bilingual texts may also help create a more inclusive learning environment, particularly for indigenous learners who often struggle with unfamiliar language and cultural references in conventional instructional materials.

For School Leaders and Program Coordinators

Indigenous Peoples Education (IPED) and Community Reading Coordinators. The findings of this study may serve as a useful reference in designing literacy programs, reading interventions, and teacher development initiatives. The bilingual and culturally responsive approach demonstrated in this study may guide educators in using the mother tongue as a bridge toward English language learning while ensuring that local traditions, values, and knowledge systems remain respected and preserved.

School Administrators. School heads and instructional leaders are encouraged to support the production, reproduction, and utilization of localized reading materials within their schools. Given the favorable evaluations during the validation and implementation stages, contextualized instructional resources such as PAGLAYANG may help improve learner engagement and reading development among indigenous students.

Department of Education and the Learning Resource Management and Development System (LRMDS). Given the positive validation results and classroom implementation of the PAGLAYANG booklet, its inclusion in the Learning Resource Management and Development System (LRMDS) may be explored to facilitate wider dissemination. Continued support for culturally responsive literacy initiatives can help address the unique learning needs of indigenous learners while promoting the preservation of their language and culture.

For Instructional Material Developers and Future Researchers

Instructional Material Developers. Future developers of localized learning resources may draw insights from the design and development process employed in this study. Particular attention may be given to enhancing visual presentation, formatting consistency, and assessment activities to improve learner engagement and usability further. Collaboration with language specialists, cultural bearers, and Indigenous Peoples Mandatory Representatives (IPMRs) is likewise encouraged to ensure cultural accuracy and authenticity.

Future Researchers. Future studies may build upon the findings of this research by examining the long-term effects of culturally responsive and bilingual instructional materials on learners' reading achievement, motivation, and engagement. Similar Design and Development Research (DDR) projects may also be conducted in other learning areas such as Mathematics, Science, and Araling Panlipunan to determine whether the benefits observed in this study can be replicated across different subject areas and educational contexts.

Compliance with Ethical Standards

This study was conducted in accordance with established ethical principles in educational research, particularly the principles of Respect for Persons, Beneficence, and Justice as outlined in the Belmont Report. The research also complied with the provisions of Republic Act No. 8371, otherwise known as the Indigenous Peoples' Rights Act of 1997, and the guidelines set by the National Commission on Indigenous Peoples (NCIP). Throughout the study, careful attention was paid to protecting the rights, welfare, and cultural identity of the participants.

Before data collection, Free, Prior, and Informed Consent (FPIC) was secured through a Tribal Resolution of Consent issued by the Manobo Council of Elders and with the endorsement of the Municipal Indigenous Peoples Mandatory Representative (IPMR). Written informed consent was obtained from all adult participants, while parental consent and learner assent were secured for the Grade 7 student participants. The purpose of the study, the procedures involved, and the voluntary nature of participation were clearly explained to all participants. They were also informed that they could withdraw from the study at any stage without any negative consequences.

Confidentiality and anonymity were maintained throughout the research process. Personal identifiers were removed from interview transcripts, survey responses, and research records to ensure participant privacy. All collected data were stored securely and handled in accordance with the provisions of the Data Privacy Act of 2012 (Republic Act No. 10173).

The principle of beneficence guided the implementation of the study. Every effort was made to minimize potential risks while maximizing the educational value of the research. To reduce additional demands on participants, existing Beginning of School Year (BOSY) Phil-IRI records were used in the initial assessment of reading needs. Language specialists and the Municipal IPMR reviewed the instructional materials developed for the study to ensure linguistic accuracy, cultural sensitivity, and appropriateness for the target learners. Upon completion of the study, copies of the validated PAGLAYANG booklet were provided to the school and the local indigenous community to support continued literacy development initiatives.

The principle of justice was upheld by ensuring that all eligible Grade 7 Manobo learners had an equal opportunity to participate in the study through complete enumeration. Research activities were integrated into regular school schedules to avoid placing additional financial, academic, or personal burdens on the participants and their families.

The researcher further declares that no financial, professional, or personal conflicts of interest influenced the conduct of this study. Academic integrity was upheld throughout the research process by properly citing and acknowledging all sources consulted. Data were analyzed and interpreted based on the evidence gathered, and the findings were reported honestly and responsibly for academic and educational purposes.

To promote transparency, the researcher discloses the use of an artificial intelligence (AI) language tool for limited editorial assistance, including language refinement, organization of ideas, and improvement of readability. However, all aspects of the research process—including the conceptualization of the study, collection of data, analysis of findings, interpretation of results, and formulation of conclusions and recommendations—were undertaken by the researcher.

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