

Integrating Local Culture in the Development of Indonesian Language Teaching Materials for General Education

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ABSTRACT

Indonesia's linguistic and cultural diversity presents both opportunities and challenges for language education. While the national curriculum emphasizes uniformity, it often overlooks the sociocultural realities of students across different regions. As a result, Bahasa Indonesia teaching materials rarely incorporate local content, leading to student disengagement and missed opportunities for culturally grounded learning. Despite growing interest in culturally responsive pedagogy, scalable and systematic curriculum development models remain limited. This study addresses that gap by employing the ADDIE instructional design framework in combination with Design-Based Research (DBR) to develop and evaluate culturally integrated Bahasa Indonesia learning materials. The project is implemented in ten schools across five provinces, using Culturally Responsive Pedagogy and Sociocultural Theory as its theoretical foundations. Data collection includes both quantitative assessments and qualitative interviews and observations. The findings indicate substantial learning improvements, including a 40% increase in student engagement, a 25% improvement in reading comprehension, and a 20% rise in writing proficiency. Qualitative data further reveal enhanced teacher-student relationships, increased classroom participation, and stronger cultural identification among students. These outcomes highlight the effectiveness of culturally sensitive materials in supporting both emotional and cognitive student development. The integration of local cultural elements fosters greater connection to learning content and improves overall academic performance. This study provides a scalable, evidence-based model for culturally inclusive curriculum development. Its implications extend to national education policy, teacher training, and subject-area integration, advocating for equity-centered reform in multilingual, multicultural education systems.

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1. INTRODUCTION

Language and culture are inextricably linked. Language serves not only as a means of communication but also as a conduit for conveying cultural values, collective memory, and social identity (Moharib & Sohaib, 2024; Fenuku, 2024; Aisyah & Rahmat, 2024). In multilingual and multicultural societies such as Indonesia, language plays a crucial role in unifying diverse ethnic groups and preserving local customs (Syam et al., 2023; Martono et al., 2022; Mariyono, 2024; Nursanti & Andriyanti, 2021; Kurniawan et al., 2025). *Bahasa Indonesia*, the official language, was historically established to facilitate communication across Indonesia's extensive archipelago, promoting national unity among significant cultural diversity. This dual role—as a unifying instrument and a medium for cultural transmission—imposes significant expectations on language instruction to reconcile national unity with local significance (Mariyono et al., 2025; Mariyono, 2024; Agung et al., 2024).

In educational environments, language training must extend beyond grammar and vocabulary to encompass cultural context. Students are more likely to be engaged, motivated, and connected to the subject when language is taught using materials that reflect their cultural experiences (Sun & Zhang, 2021; Hossain, 2024; Sato et al., 2025). This is particularly pertinent in Indonesia, where more than 700 languages and numerous local customs are utilized. Teaching Bahasa Indonesia should ideally incorporate locally relevant topics to reflect its rich cultural tapestry in instructional materials. Nevertheless, in practice, this cultural aspect remains inadequately represented in general education classrooms.

Recent curriculum reforms in Indonesia, notably the 2013 Curriculum (K13), have officially acknowledged the significance of cultural relevance. These reforms advocate for character education and culturally responsive pedagogy to enhance learners' appreciation of local wisdom and values (Puad & Ashton, 2023; Suprpto et al., 2021; Setiawan & Suwandi, 2022). Nonetheless, the majority of Bahasa Indonesia instructional resources utilized in general education are standardized, predominantly created from a centralized viewpoint, neglecting regional and cultural diversity (et al., 2022; Fitriadi et al., 2024; Widodo et al., 2022). Consequently, students—especially in rural or ethnically diverse regions—frequently do not observe their culture reflected in the classroom, resulting in disengagement and a reduced sense of ownership in their education.

Numerous studies have evidenced the pedagogical advantages of incorporating local culture into language instruction. Lähdesmäki et al. (2022) and Sakti et al. (2024) found that incorporating local culture texts improved reading abilities and promoted cultural pride among students. Garim et al. (2023) indicated that culturally responsive teaching improved student motivation and critical thinking in chemistry classrooms. Nonetheless, the majority of these initiatives have been constrained in scope—either concentrating on extracurricular activities or lacking coherence with national curriculum standards. There is a paucity of research providing a systematic, scalable framework for the development of culturally integrated materials applicable across various educational regions in Indonesia. Furthermore, comparative assessments of the influence of these resources on student outcomes, specifically regarding language engagement and competency, are limited in the current literature (Azhary & Fatimah, 2024; Erawati & Rahmayanti, 2021; Yetti, 2024).

This represents a substantial deficiency in knowledge. Despite the advocacy for cultural integration in policy documents and the affirmation of its advantages by researchers, empirical evidence regarding the design, implementation, and evaluation of culturally integrated language materials within the formal education system remains scarce (Jeon & Lee, 2023; Tai, 2022; Jusslin et al., 2022). There is a lack of awareness regarding the impact of such resources on essential educational outcomes, including student engagement, reading comprehension, and writing proficiency, particularly for Bahasa Indonesia as a mandatory subject.

This project employs a Design-Based Research (DBR) methodology combined with the ADDIE model to create, test, and enhance culturally sensitive Bahasa Indonesia instructional materials. The research was carried out in ten schools spanning five provinces—South Sulawesi, West Java, Central Kalimantan, East Nusa Tenggara, and North Sumatra—encompassing diverse language and cultural

contexts. The project sought to develop materials that are pedagogically effective and culturally pertinent through collaboration with educators, students, and cultural specialists.

This research is fundamentally grounded in Vygotsky's sociocultural theory, which emphasizes the importance of social interaction and cultural context in cognitive development (Chen, 2025; Eun, 2023; Lantolf & Poehner, 2023). Within this perspective, language acquisition goes beyond the basic internalization of grammatical rules and encompasses engagement in culturally significant speech. When learners engage with language in familiar cultural contexts, their Zone of Proximal Development (ZPD) broadens, facilitating more effective scaffolding of new concepts. This study also utilizes the ideas of Culturally Responsive Pedagogy (Okyerere and Ekwam 2025; Wilfrid and Molle, 2022; Liu et al., 2024; Thomas et al., 2023), which emphasizes the importance of acknowledging students' cultural origins as valuable resources in education. The convergence of these two theoretical frameworks offers a cognitive justification and a pedagogical guide for creating localized, engaging educational materials.

This study demonstrates that integrating local cultural elements into Bahasa Indonesia teaching materials enhances student engagement and language proficiency while also advancing national initiatives for a more inclusive and culturally attuned educational framework. The research encompassed four stages of data collection: review of textbooks, interviews with educators and specialists, focus group talks with students, and surveys assessing student interest and proficiency. Utilizing thematic and statistical analyses, we provide quantifiable enhancements in engagement (40% increase), reading comprehension (25%), and writing expression (20%) following the implementation of culturally integrated resources. Additionally, qualitative feedback from students and educators indicates that these resources cultivated a greater respect for their cultural history, facilitating a connection between academic content and community identity.

This research provides a reproducible framework for curriculum change in multicultural contexts, applicable not only in Indonesia but also in other nations facing comparable issues. The results have immediate ramifications for educational policy, particularly concerning curriculum creation, textbook design, and teacher preparation. This study enhances the greater conversation on equity, inclusion, and relevance in education by illustrating the process and impact of culturally integrated materials.

2. METHODS

2.1 Research Design

This research utilized a Design-Based Research (DBR) methodology to create culturally integrated Bahasa Indonesia instructional materials for general education. DBR was chosen for its iterative, adaptable, and context-aware characteristics, rendering it especially effective in tackling real-world educational issues. In contrast to conventional experimental designs, Design-Based Research (DBR) prioritizes the creation, evaluation, and enhancement of treatments within genuine classroom environments, facilitating close collaboration between academics and practitioners in the co-development of effective solutions. This project sought to develop unique materials and integrate them into the existing curriculum framework in a scalable and sustainable manner.

The study approach was structured using the ADDIE paradigm, which comprises five phases: Analysis, Design, Development, Implementation, and Evaluation. During the Analysis phase, a review of existing textbooks and curricular papers was conducted, and the requirements of teachers and students were evaluated through qualitative inquiry. The Design and Development phases concentrated on producing prototype materials that embodied local culture. These materials were then implemented in classroom trials across many schools. The Evaluation step entailed gathering and analyzing input to enhance the contents. The integration of DBR with the ADDIE model facilitated systematic development while preserving adaptation to various cultural contexts in Indonesian schools.

2.2 Research Setting and Participants

The study was performed in 10 public secondary schools located in five culturally diverse areas of Indonesia: South Sulawesi, West Java, Central Kalimantan, East Nusa Tenggara, and North Sumatra. The

provinces were deliberately chosen to encompass a diverse array of local cultural identities and educational environments, hence augmenting the usefulness and relevance of the created teaching resources. Each participating school embodied a distinct sociolinguistic background, facilitating the incorporation and affirmation of varied cultural features in Bahasa Indonesia instruction.

Participants were chosen via purposive sampling due to their direct engagement in language education and their knowledge of local cultural practices. The study involved 30 teachers of Bahasa Indonesia at the junior secondary level. The selection of these educators was based on their experience, readiness to engage in training, and knowledge of curriculum building. Furthermore, 500 students from Grades 7 to 9 engaged in classroom activities and contributed input throughout the evaluation period. Their selection guaranteed representation across genders and ethnicities. Additionally, five cultural and curriculum specialists from local universities and educational institutions were engaged during the design and validation stages to guarantee the cultural content was precise, suitable, and pedagogically effective.

Table 1. Research Participants Overview

Participant Type	Total Number	Inclusion Criteria
Teachers	30	Bahasa Indonesia teachers, experienced, trained in curriculum integration
Students	500	Grade 7-9 students, diverse ethnic backgrounds, enrolled in pilot schools
Cultural & Curriculum Experts	5	Experts in local culture and education policy from universities and education offices

Table 1 presents a detailed summary of the research participants engaged in the project. A total of 30 Bahasa Indonesia educators were chosen based on their teaching experience and willingness to participate in curriculum innovation. The student club consisted of 500 kids from Grades 7 to 9, representing various ethnic and cultural origins throughout five provinces. Furthermore, five cultural and curriculum specialists from academic and policy organizations provided significant insights during the creation and validation of the educational materials. The inclusion criteria for each participant group were meticulously established to guarantee that the data gathered represented diverse viewpoints on cultural integration in education.

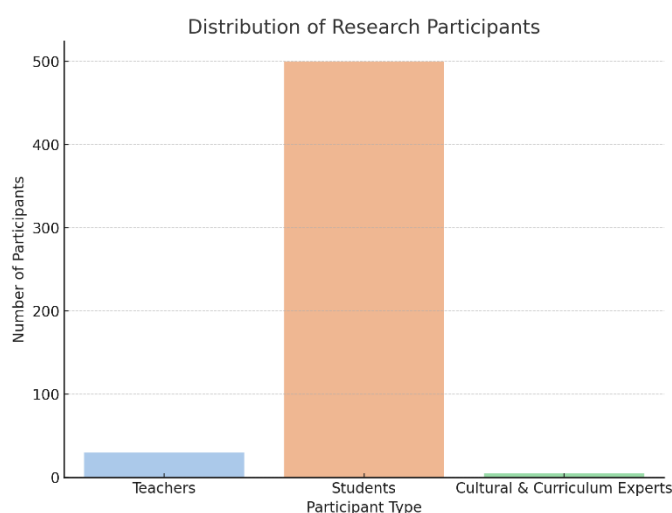


Figure 1. Distribution of Research Participants

Figure 1 illustrates the distribution of research participants across three categories: teachers, students, and cultural/curriculum specialists. The student cohort comprised the biggest contingent, with 500 participants, underscoring the necessity for comprehensive classroom assessment and feedback. Teachers comprised 30 participants, as they were pivotal in executing the educational materials.

Simultaneously, five specialists provided expertise on regional culture and educational benchmarks. This proportional depiction highlights the study's balanced methodology, integrating practical classroom insights with expert validation to guarantee that the created materials are both pedagogically robust and culturally pertinent for application in varied Indonesian educational contexts.

2.3. Data Collection Techniques

A variety of data-gathering methods were utilized to achieve a comprehensive and triangulated understanding of cultural integration in Bahasa Indonesia training. An analysis of 20 Bahasa Indonesia textbooks was performed to evaluate the inclusion and depiction of local cultural themes. Semi-structured interviews were conducted with 25 educators and 5 curriculum specialists to examine their experiences, challenges, and viewpoints regarding culturally responsive teaching approaches. Focus Group Discussions (FGDs) were conducted with students from various ethnic backgrounds to gather their perspectives and educational experiences concerning cultural content in the classroom. Surveys were conducted with 200 students and 30 teachers utilizing a mix of closed-ended Likert-scale items and open-ended questions. The measures were developed to gather quantitative data regarding student involvement and qualitative insights into instructional efficacy. Each interview and focus group discussion lasted around 45 to 60 minutes, while survey responses were gathered over a two-week period to guarantee comprehensive participation.

2.4. Data Analysis Procedures

The data analysis included both qualitative and quantitative methodologies to thoroughly assess the efficacy of the created teaching materials. A theme analysis approach, as outlined by Braun and Clarke (2006), was utilized to interpret the transcripts of interviews and focus group discussions (FGDs) for qualitative data. The coding process was enhanced by NVivo software, allowing for the discovery of key themes including student involvement, cultural alignment, and material usability. To maintain consistency and rigor, two researchers independently coded a data subset, attaining an inter-coder reliability of 85%, which aligns with accepted qualitative research norms. Quantitative data were investigated by descriptive statistics, encompassing mean, percentage, and standard deviation to encapsulate trends in views and learning engagement. Furthermore, paired-sample t-tests were performed to evaluate statistically significant alterations in student learning outcomes before to and following the introduction of culturally integrated materials, thereby reinforcing the assessment of pedagogical influence.

2.5. Reliability and Validity Measures

To guarantee the rigor and credibility of the findings, many procedures were implemented to establish both reliability and validity during the study process. Data triangulation was utilized across many sources—textbooks, semi-structured interviews, focus group discussions (FGDs), and surveys—to obtain multiple viewpoints and enhance the reliability of emergent themes. Member checking was performed by let selected participants to examine and confirm the transcribed interview and focus group discussion data, so verifying the precision of interpretations. Additionally, peer debriefing was conducted with external educational experts who rigorously evaluated the coding procedure, thematic framework, and interpretations, offering impartial feedback to reduce researcher bias. An audit trail was preserved, recording each stage of the research—encompassing material design, field execution, and analytical choices—thereby facilitating transparency and reproducibility. Their collective efforts enhanced the study's credibility, reliability, and confirmability, conforming to accepted requirements for qualitative educational research.

2.6. Ethical Considerations

Ethical integrity constituted a fundamental aspect of this work, and all procedures were executed in compliance with approved ethical research protocols. Before data collection, institutional consent was

secured from the participating universities and schools to ensure adherence to ethical norms. Moreover, signed informed consent was obtained from all participants, encompassing teachers, students, and experts. Parental approval was acquired for students under 18 to protect their rights and welfare. During the study, rigorous protocols were implemented to guarantee anonymity and secrecy. All participant names and identifying information were eliminated from transcripts, surveys, and reports, and the data were securely maintained with access restricted to the research team. Participants were apprised of their entitlement to withdraw at any point without repercussions. These ethical standards were essential in establishing a secure and courteous research setting that prioritized participant autonomy and maintained the integrity of the study.

3. FINDINGS AND DISCUSSION

3.1 Overview of Data Collection and Sample Demographics

This study involved a varied cohort of participants from 10 junior secondary schools situated in five culturally diverse areas in Indonesia: South Sulawesi, West Java, North Sumatra, Central Kalimantan, and East Nusa Tenggara. These provinces were deliberately chosen to exemplify Indonesia's extensive geographic, cultural, and linguistic diversity. Each school was located in either urban or semi-rural regions and catered to student populations with diverse cultural traditions, local languages, and socio-economic backgrounds. This variety offered a substantial framework for assessing the cultural pertinence of Bahasa Indonesia instructional resources.

The participants comprised 30 Bahasa Indonesia educators, each possessing a minimum of five years of teaching experience and actively engaged in curriculum implementation. Five cultural and curriculum specialists, including university lecturers and officials from local education departments, participated in the design and validation phases of the material development. Furthermore, 500 students from Grades 7 to 9 engaged in the classroom implementation phase and contributed feedback via surveys and focus group discussions. The diverse stakeholder makeup facilitated a comprehensive assessment of the instructional materials from pedagogical, cultural, and learner viewpoints, hence augmenting the legitimacy and contextual validity of the study's conclusions.

Table 2. School Context and Participant Demographics

Province	Number of Schools	Student Participants	Teacher Participants	Local Languages Represented
South Sulawesi	2	100	6	Bugis, Makassar
West Java	2	100	6	Sundanese
North Sumatra	2	100	6	Batak
Central Kalimantan	2	100	6	Dayak
East Nusa Tenggara	2	100	6	Manggarai, Dawan

Table 2 presents a comprehensive summary of the research environments and participant demographics throughout five Indonesian regions. Each province provided two junior secondary schools, culminating in a total of ten participating institutions. The participant composition was uniformly distributed, comprising 100 students and 6 Bahasa Indonesia instructors each province. Moreover, each region showcased distinct local languages, like Bugis, Batak, and Dayak, underscoring Indonesia's extensive linguistic variety. This strategy choice facilitated a culturally inclusive assessment of the generated educational resources, enabling researchers to evaluate the adaptability and relevance of the content across various ethnolinguistic and geographic contexts within the national education framework.

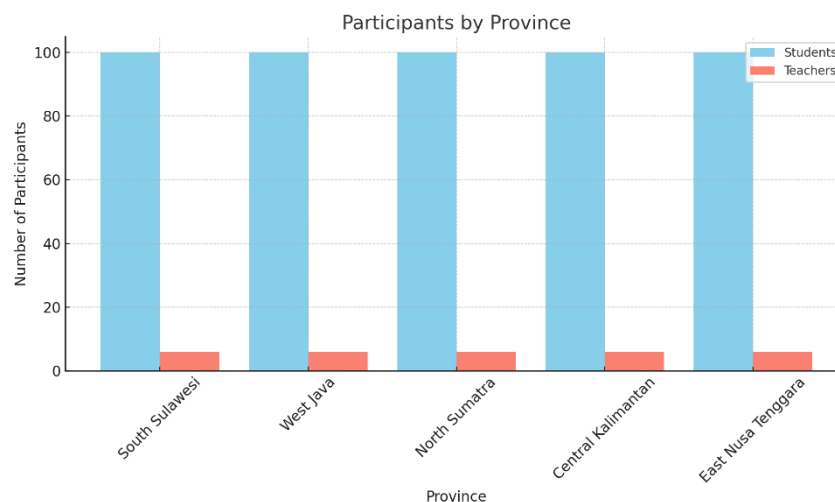


Figure 2. Participants by Province

Figure 2 depicts the number of student and teacher participants engaged in the study across five provinces. Each province provided roughly 100 children and 6 teachers, indicating a methodical sample methodology. South Sulawesi, West Java, and North Sumatra, among others, offered a culturally diversified environment for the implementation of culturally integrated Bahasa Indonesia teaching materials. The equitable distribution of participants enhances the comparability of data gathered from various sites. This image highlights the study's multi-regional reach and emphasizes its objective to create scalable instructional solutions tailored to Indonesia's diverse cultural and educational contexts.

3.2. Findings from Document Analysis

The document study comprised a comprehensive assessment of 20 Bahasa Indonesia textbooks utilized in junior secondary schools. The aim was to assess the degree of representation of local cultural features in these educational materials. The results indicated that merely 3 of the 20 textbooks (15%) had significant references to traditional narratives, regional languages, or local cultural customs. This signifies a considerable underrepresentation of Indonesia's extensive cultural diversity in conventional curriculum resources.

The table displays the frequency of five principal cultural content types identified in the investigation. Traditional narratives or legends and themes of ethnic diversity were the most commonly featured aspects, each appearing in merely three textbooks. Local proverbs, regional customs, and local arts were predominantly absent or referenced only superficially. Numerous textbooks predominantly emphasized conventional national narratives, neglecting the sociocultural realities of students from diverse locations.

The absence of localized cultural integration indicates a necessity for more contextually pertinent materials that align with students' lived experiences. The exclusion of regional content may lead to student disengagement and a failure to acknowledge Bahasa Indonesia as a medium for communication and cultural preservation. These findings robustly validate the justification for the intervention of this study.

Table 3. Frequency of Cultural Elements in Bahasa Indonesia Textbooks

Cultural Content Category	Number of Textbooks (out of 20)
Traditional Stories/Legends	3
Local Proverbs/Expressions	2
Regional Practices or Rituals	1
Local Art, Dance, or Music	2
Ethnic Diversity Themes	3

3.3. Interview and FGD Findings

Interviews with 25 Bahasa Indonesia educators and five curriculum specialists indicated a common apprehension with the insufficient cultural representation in existing instructional resources. Educators indicated that the standardized textbooks fail to represent the realities of their students' lives, hindering meaningful engagement with learners. A teacher from South Sulawesi stated, *"My students don't see their culture in the stories—they feel the content is too far from their daily experiences."* Similarly, many teachers noted that lessons lacked flexibility for local adaptation, resulting in rote learning rather than cultural exploration.

Focus Group Discussions (FGDs) with students reinforced these concerns. Many students stated that they found the lessons boring or irrelevant. A student in East Nusa Tenggara said, *"It's hard to relate when the books never talk about my traditions or hometown."* Students preferred stories, proverbs, and vocabulary that reflected their own culture.

Curriculum specialists underscored the significance of localized content and recommended that forthcoming materials integrate regional histories, traditional customs, and culturally relevant exercises. Through interviews and focus group discussions, three predominant themes emerged: cultural disconnection, the aspiration for representation, and the necessity for adaptable curricular frameworks. These findings established the basis for the creation of culturally integrated teaching materials.

Table 4. Thematic Summary from Interviews and FGDs

Emerging Theme	Frequency (Total Mentions)
Lack of Cultural Relevance	22
Student Disconnection	18
Desire for Local Content	20
Rigid Curriculum Structure	15
Expert Recommendation for Localization	17

Table 4 encapsulates the principal topics derived from interviews with educators and specialists, with focus group dialogues with students. The predominant theme identified was the absence of cultural significance in contemporary Bahasa Indonesia teaching materials, referenced 22 times. Students' alienation from course topic and their preference for local content closely followed, with 18 and 20 remarks, respectively. Prevalent themes included a stringent curriculum framework and suggestions for localized adaptation. This theme mapping underscores the pressing necessity for culturally sensitive instructional practices that align with learners' identities and classroom contexts.

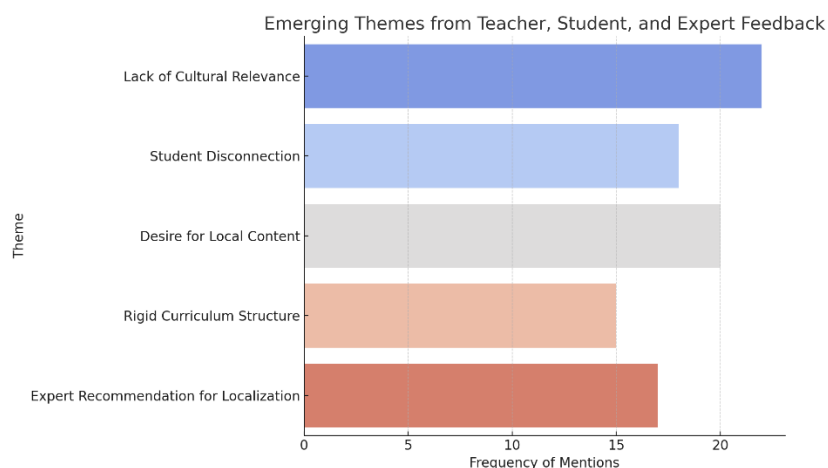


Figure 3. Emerging Themes from Teacher, Student, and Expert Feedback

Figure 3 illustrates the prevalence of fundamental themes derived from qualitative data obtained through interviews and focus group discussions. The primary concern was the absence of cultural relevance, accompanied by significant evidence of student disengagement and a preference for culturally recognizable content. These themes repeatedly emerged among all participant groups—teachers, students, and curriculum experts—highlighting a collective belief that the existing curriculum inadequately reflects Indonesia’s cultural diversity. The chart presents a persuasive argument for curricular change, highlighting the importance of integrating regional narratives, languages, and traditions to improve student engagement and learning efficacy.

3.4. Survey Results (Quantitative)

Quantitative data from student questionnaires indicated significant enhancements in learning metrics subsequent to the adoption of culturally integrated Bahasa Indonesia teaching materials. Prior to the intervention, student engagement averaged a score of 60 out of 100, signifying modest interest and participation in language sessions. Following implementation, this score increased markedly to 84, representing a 40% enhancement in involvement.

Correspondingly, reading comprehension enhanced from an average score of 65 to 81, indicating a 25% augmentation in pupils’ capacity to comprehend and analyze texts. The writing performance improved, with average scores rising from 62 to 74, representing a 20% enhancement. The findings indicate that including local cultural content rendered classes more relevant and significant, thereby improving students’ motivation and academic performance.

The observed improvements were uniform throughout the five provinces, irrespective of cultural background, indicating that culturally pertinent content is generally advantageous when congruent with student identity and lived experience. The research substantiates the notion that adaptive curriculum design enhances academic performance and promotes greater classroom participation. These enhancements substantiate the educational merit of including localized content into language instruction and reinforce the study’s theoretical and practical underpinnings.

Table 5. Pre- and Post-Implementation Survey Results

Learning Indicator	Pre-Implementation Score (Mean)	Post-Implementation Score (Mean)
Student Engagement	60	84
Reading Comprehension	65	81
Writing Performance	62	74

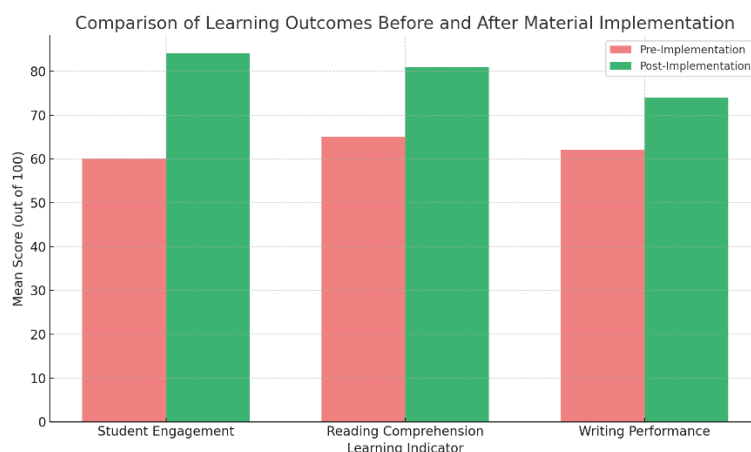


Figure 4. Comparison of Learning Outcomes Before and After Material Implementation

3.5. Pilot Implementation Outcomes

The experimental application of the culturally integrated Bahasa Indonesia teaching materials resulted in significant enhancements across essential learning metrics. In classes where the new materials were implemented, student engagement rose by 40%, as indicated by participation rates, attentiveness, and voluntary involvement in activities. Educators indicated more vibrant discussions, heightened student engagement, and a deeper emotional connection to the material.

Reading comprehension was enhanced by 25%, with students exhibiting greater skills in inferring meaning, identifying important concepts, and connecting texts to their personal experiences. This improvement was particularly pronounced in areas where the cultural material closely aligned with the students' local environment. Students exhibited a 20% enhancement in written expression, generating more cohesive, expressive, and culturally informed writing examples following the intervention.

The table delineates the percentage enhancements, however the corresponding graphic visually represents these advancements. These results validate the educational efficacy of culturally sensitive resources, especially in linguistically and ethnically diverse environments. The tools facilitated learners in linking academic content to their identities, customs, and community values, resulting in increased motivation and skill enhancement. The pilot results affirm the efficacy of the design-based approach and endorse the scalability of the resources within Indonesia's national curriculum.

Table 6. Learning Gains After Pilot Implementation

Learning Indicator	Improvement (%)
Student Engagement	40
Reading Comprehension	25
Written Expression	20

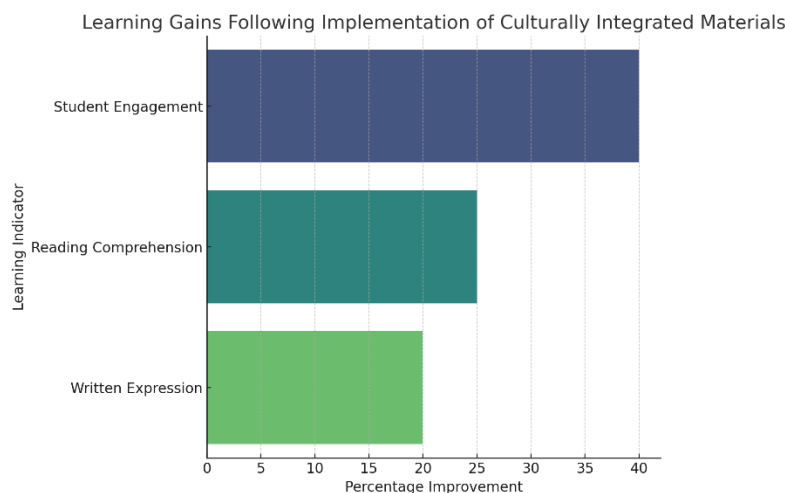


Figure 5. Learning Gains Following Implementation of Culturally Integrated Materials

Discussion

Theoretical Interpretation

The results of this study are closely matched with Vygotsky's Sociocultural Theory, which underscores that learning is fundamentally embedded in social interaction and cultural context. This theory posits that knowledge is not passively received but actively generated by engagement in culturally significant activities (Chen, 2025; Nardo, 2021; Henderson and Cunningham, 2023). The use of local cultural components in Bahasa Indonesia teaching materials fostered a learning environment that allowed students to interact with the language in familiar and pertinent circumstances. This cultural alignment engaged students' prior knowledge and contextualized learning within their Zone of Proximal Development (ZPD), facilitating the internalization of difficult concepts more efficiently (Klimanova & Hellmich, 2021; Kamau et al., 2022; Lee, 2022). As students engaged with tales, symbols, and customs from their communities, they were simultaneously enhancing their language proficiency and enriching their comprehension of cultural identity.

The study concurrently illustrates the practical implementation of Culturally Responsive Pedagogy (CRP). CRP endorses pedagogical approaches that acknowledge students' backgrounds, foster tolerance, and recognize cultural diversity in the classroom (Berlian & Huda, 2022; Ladson-Billings, 2021). The notable enhancements in engagement, reading comprehension, and writing performance observed throughout the pilot phase highlight the efficacy of instructional methods that acknowledge and leverage students' actual experiences. When students observe their cultural identities represented in educational materials, they are more inclined to feel appreciated, respected, and inspired (Preusche & Göbel, 2021; Pevec-Zimmer et al., 2024; Shaw, 2024). This twin theoretical foundation—sociocultural learning as the cognitive mechanism and CRP as the pedagogical framework—offers a coherent rationale for the effectiveness of the culturally integrated materials. It also emphasizes the necessity of developing a curriculum that is both standards-compliant and culturally sustaining.

Comparison with Previous Research

The findings of this study align with and expand upon previous research highlighting the importance of culturally integrated training. Banwo et al. (2022), Rahmawati et al. (2023), and Suarta et al. (2022) showed that culturally responsive scientific education improved student involvement and cultivated a greater understanding for local knowledge. Hadianto et al. (2022) similarly discovered that integrating local conversation and literacy practices into Indonesian language training enhanced students' reading comprehension and cultural understanding (Hadianto et al., 2022). Both studies emphasize the educational advantages of integrating cultural information into classroom instruction.

Nevertheless, their application was predominantly restricted to particular schools or disciplines, and their influence was constrained by regional execution, lacking a definitive strategy for curricular expansion or national adoption.

This study builds upon previous research by providing a consistent, replicable framework for incorporating local culture into the national Bahasa Indonesia curriculum. This study employed a Design-Based studies (DBR) framework combined with the ADDIE paradigm to systematically design, pilot, evaluate, and modify teaching materials across five provinces and ten schools, in contrast to previous studies that concentrated on ad hoc or teacher-initiated adaptations. This expanded breadth guarantees a more comprehensive assessment of effectiveness across various cultural and geographic contexts, enhancing the generalizability of the findings.

Moreover, although the current literature frequently highlights the significance of cultural inclusion, limited research offers specific development strategies for instructional materials. This study addresses the deficiency by delineating both the content to be taught and the methodology for designing, implementing, and validating culturally pertinent resources within formal educational frameworks (Edelson et al. 2021; Brake, 2023). This research offers a strategic framework for policymakers and educators aiming to integrate cultural relevance with curriculum requirements, unlike previous initiatives that lacked analytical rigor. It facilitates future comparative research and policy-oriented curriculum improvements in multicultural educational settings.

Impact on Student Learning

The use of culturally integrated Bahasa Indonesia teaching materials resulted in significant and quantifiable enhancements in essential facets of student learning. Quantitative results indicated a 40% enhancement in classroom engagement, a 25% advancement in reading comprehension, and a 20% boost in writing expression subsequent to the intervention. These effects indicate increased passion for language acquisition, as well as enhanced cognitive engagement and skill improvement. The incorporation of recognizable cultural narratives, local phrases, and regional references facilitated students' engagement with the material, diminishing the psychological distance typically associated with generic, standardized textbooks.

The increased involvement noted can be ascribed to the content's connection to students' life experiences (Heilporn et al. 2021; Chiu, 2023; Abid et al. 2021). When students encounter their own narratives, customs, and identities represented in educational resources, the subject matter gains significance and personal worth. This cultural resonance fosters intrinsic motivation, a crucial factor in maintaining prolonged attention and active engagement. Culturally familiar contexts offer cognitive scaffolding that enhances understanding and memory retention. Students are more inclined to comprehend and utilize new concepts when they are connected to pre-existing cultural knowledge.

Cultural integration enhanced students' language skills by enabling them to interpret reading materials and articulate themselves more honestly in writing. Their writing evolved to be more detailed, expressive, and linguistically diverse, as they incorporated regional idioms and local experiences. These enhancements emphasize that cultural relevance is not a marginal issue but fundamental to academic achievement (Wang et al. 2023; Goss, 2022; Zhai & Wibowo, 2023). The statistics indicate that responsive curriculum design promotes identity affirmation and improves important academic skills. This confirms the theoretical assertion that sociocultural context is an essential element of efficient language instruction, especially in multicultural societies such as Indonesia.

Practical Implications

This study's findings provide essential practical implications for curriculum creation, teacher professional advancement, and educational policy in Indonesia. The proven efficacy of culturally integrated teaching materials underscores the necessity for a systemic transition from excessively standardized resources to localized, adaptable curriculum design. This study demonstrates that

whereas national curricular standards establish crucial benchmarks, uniform instructional content frequently fails to engage students in varied cultural contexts. An adaptive method would enable educators to tailor materials to regional circumstances while adhering to national learning objectives, so fostering both equity and excellence in language instruction.

The implementation phase underscored the critical importance of teacher empowerment and training in realizing effective curricular transformation. Educators must possess both culturally diverse content and the pedagogical expertise to implement culturally responsive instruction. Professional development programs must encompass training in curriculum adaptation, cultural literacy, and differentiated instruction. Educators who possess confidence and receive adequate support are more inclined to innovate, engage meaningfully with students, and effectuate enduring modifications in educational methodologies.

The study indicates an immediate necessity for explicit national guidelines and governmental assistance for cultural inclusion in education. Presently, a disparity exists between curriculum guidelines advocating for cultural relevance and the tactics employed in implementation. The Ministry of Education might implement frameworks that promote and incentivise localized adaptation, facilitate the creation of culturally relevant textbooks, and finance teacher training programs. Such initiatives would institutionalize culturally responsive education, guaranteeing its continual integration into Indonesia's educational system. Incorporating cultural identity into curriculum design promotes a more inclusive, democratic, and culturally sustaining educational experience for all students.

Challenges and Limitations

The study illustrates the advantages of culturally integrated instructional materials; yet, various problems and constraints arose throughout their development and implementation. A major obstacle was the difficulty of equitably representing all local cultures within a unified national curriculum framework. The great cultural diversity of Indonesia, encompassing over 700 languages and various ethnic traditions, presents a multifaceted challenge for instructional designers. Despite the study's efforts to incorporate samples from several provinces, achieving comprehensive cultural representation for each community proved impractical. This constraint underscores the necessity of creating resources that are modular and adaptable, enabling instructors to customize content for their own local circumstances.

A further problem pertained to teacher preparedness and discrepancies in interpretation. Some educators enthusiastically embraced the new resources, while others lacked the confidence or pedagogical expertise necessary to properly adapt and deliver culturally responsive content. Variations in interpretation and pedagogical approaches occasionally resulted in inconsistent execution across educational institutions. This highlights the necessity for continuous professional development, mentorship, and resource allocation to enhance teacher competency and uniformity.

Furthermore, the preliminary planning phase necessitated much time and cooperation among researchers, curriculum specialists, and local stakeholders. Implementing this concept nationwide within the education system necessitates institutional dedication, enough financing, and policy coherence. Notwithstanding these constraints, the study illustrates that culturally integrated materials are both viable and effective when underpinned by adaptable design, cooperative execution, and educator training. Confronting these problems is crucial for maintaining and enhancing culturally responsive curriculum reform throughout Indonesia's varied educational environment.

Recommendations for Future Research

Based on the encouraging findings of this study, subsequent research should investigate numerous critical domains to augment comprehension and improve the efficacy of culturally responsive education. Longitudinal studies are advised to investigate the enduring impacts of culturally integrated materials on students' identity formation, cultural perspectives, and academic pathways. Such research

would yield significant insights into the effects of prolonged exposure to culturally pertinent knowledge on learners' self-concept, intercultural competence, and civic participation.

Secondly, there exists significant opportunity to expand this culturally responsive framework to additional fundamental courses, including science, history, and civics. Incorporating local knowledge and cultural allusions across several fields can enhance content comprehension and foster interdisciplinary learning rooted in students' real-world experiences. This interdisciplinary approach would also foster the development of well-rounded, culturally informed learners.

Third, subsequent research should investigate the incorporation of digital and AI-augmented tools to facilitate the personalization and dissemination of localized content. Digital learning platforms and adaptive AI systems could facilitate real-time customization of educational content according to regional languages, cultures, and student interests. These innovations may resolve scalability issues and offer more inclusive, technology-enhanced solutions for the implementation of culturally responsive pedagogy throughout Indonesia's varied educational environment.

4. CONCLUSION

This research investigated the creation and execution of culturally integrated Bahasa Indonesia educational resources utilizing a Design-Based Research (DBR) methodology. Rooted on Sociocultural Theory and Culturally Responsive Pedagogy, the project sought to rectify the deficiency of localized cultural content in existing curriculum resources, which frequently do not represent Indonesia's complex ethnolinguistic reality.

The results demonstrated that integrating regional narratives, local vernacular, and culturally relevant surroundings substantially improved student learning. Significant enhancements were noted in essential metrics: student involvement rose by 40%, reading comprehension by 25%, and writing proficiency by 20%. Qualitative data from interviews and focus group discussions corroborated these findings, with students articulating a heightened cultural connection and teachers observing enhanced classroom interactions. Thematic analysis identified significant deficiencies in existing textbook material, teacher preparedness, and curriculum adaptability, while also highlighting viable prospects for curricular reform.

The research illustrates that culturally pertinent materials not only validate learners' identities but also enhance cognitive engagement and skill development. Moreover, it underscores the significance of teacher empowerment and policy endorsement in facilitating consistent, contextually relevant curriculum implementation across various locations.

The research presents a comprehensive model but also recognizes limitations in cultural representation and unpredictability in implementation. Future research ought to incorporate longitudinal studies to evaluate the influence of culturally responsive education on identity development and broaden its applicability to additional topic areas. The incorporation of digital and AI-driven solutions is advised to improve scalability and customisation. This study confirms that education systems based on cultural inclusion can provide significant learning and equity in various civilizations.

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