

Analysis of the Needs for Developing Papua Context-Based Literacy Teaching Materials for ANBK Preparation: A Literature Review

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Keywords:

ANBK, teaching materials, 3T areas, Papuan context, literacy.

Abstract

This study aims to analyze the needs and strategies for developing Papuan context-based literacy teaching materials in preparation for the National Computer-Based Assessment (ANBK). Following a systematic literature review method, this study analyzed journal articles, reference books, policy documents and research reports published in the 2019-2024 timeframe. The results showed three main findings: (1) the condition of literacy in Papua requires a socio-cultural context-based approach, not just technical reading and writing skills; (2) the implementation of ANBK in the 3T (*Terdepan, Terluar, Tertinggal*) areas of Papua faces specific challenges related to technological infrastructure, teacher readiness, and student understanding of the context of the questions; (3) the development of effective teaching materials needs to integrate three aspects, namely the local context that accommodates Papuan cultural wisdom, pedagogical approaches that support learning independence, and a continuous formative evaluation system. This study recommends the development of teaching materials that integrate national curriculum standards with local Papuan contexts to increase the effectiveness of ANBK preparation.

Kata kunci:

ANBK, bahan ajar, daerah 3T, konteks Papua, literasi.

Article history:

Received: 18-11-2024

Revised: 23-11-2024

Accepted: 31-12-2024

Abstrak

Penelitian ini bertujuan untuk menganalisis kebutuhan dan strategi pengembangan bahan ajar literasi berbasis konteks Papua dalam persiapan Asesmen Nasional Berbasis Komputer (ANBK). Menggunakan metode kajian literatur sistematis, penelitian ini menganalisis artikel jurnal, buku referensi, dokumen kebijakan, dan laporan penelitian yang dipublikasikan dalam rentang waktu 2019-2024. Hasil penelitian menunjukkan tiga temuan utama: (1) kondisi literasi di Papua membutuhkan pendekatan berbasis konteks sosial-budaya, bukan hanya kemampuan teknis membaca dan menulis; (2) implementasi ANBK di daerah 3T (*Terdepan, Terluar, Tertinggal*) Papua menghadapi tantangan spesifik terkait infrastruktur teknologi, kesiapan guru, dan pemahaman siswa terhadap konteks soal; (3) pengembangan bahan ajar yang efektif perlu mengintegrasikan tiga aspek yaitu konteks lokal yang mengakomodasi kearifan budaya Papua, pendekatan pedagogis yang mendukung kemandirian belajar, dan sistem evaluasi formatif berkelanjutan. Penelitian ini merekomendasikan pengembangan bahan ajar yang memadukan standar kurikulum nasional dengan konteks lokal Papua untuk meningkatkan efektivitas persiapan ANBK.

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INTRODUCTION

Education is the main foundation for developing quality and competitive human resources. The National Education System Law mandates the importance of improving education quality standards as a strategic effort to create competent human resources. The Computer-Based National Assessment (ANBK) is one of the government's efforts to evaluate and improve the quality of education (Education Assessment Center, 2022).

Observation results show that the implementation of ANBK in the fifth grade of elementary school/Islamic elementary school still has some problems. Students have difficulty understanding, working on, and interpreting the questions given. The use of conventional teaching materials, which are not relevant to the local context of students' daily lives, further adds to the problems, so that students do not understand the material. As a result, students do not have independence in learning (Firdaus & Hadaming, 2023).

A preliminary study at MI Negeri Merauke revealed that learning was still conventional with a low score on local context integration (2 out of 4). Students had difficulty understanding ANBK questions (score 2) and showed a low level of learning independence (score 2). Qualitative findings showed students' enthusiasm for local content and teachers' openness to learning innovations, but this potential has not been implemented.

This community service activity aims to develop local context-based teaching materials that can improve students' understanding, encourage learning independence, and prepare them to face ANBK. By focusing on the needs of the community, especially teachers and students in Merauke Regency, this activity aims to provide an innovative solution to the region's educational challenges.

RESEARCH METHOD

This study uses a qualitative approach with a systematic literature review method to identify, analyze, and integrate various research findings related to the development of local context-based teaching materials and the implementation of ANBK in Papua. The application of the systematic literature review method is expected to enable a comprehensive review of various sources to understand the difficulties of creating teaching materials that are appropriate to the local context of Papua. Data sources used in this study include journal articles, reference books, government policy documents, and research reports published in the 2019-2024 period.

In the data collection process, this study applies the inclusion criteria for this study including (1) research on the development of contextual and local culture-based teaching materials; (2) studies on student literacy in Papua, especially those related to ANBK; (3) research on the application and challenges of ANBK implementation in 3T areas (underdeveloped, frontier, outermost); and (4) studies on local context-based learning that is relevant to the local environment and culture. These criteria are applied to ensure that the data analyzed is truly relevant to the research objectives. Data analysis was conducted using content analysis techniques with the following stages: (1) data collection from various relevant and high-quality sources, which will provide in-depth

insights into the aspects studied; (2) data reduction by focusing on the most significant themes to achieve research objectives, such as developing teaching materials that are relevant to the local context and increasing understanding of ANBK; (3) data presentation in a systematic thematic form, to facilitate interpretation and comparison between studies; and (4) concluding based on patterns that emerge in the analyzed literature, which will provide a basis for recommendations for more effective learning strategies in the 3T area.

Through a systematic analysis process, the study is expected to produce a broader and more useful understanding of the needs and strategies for developing literacy teaching materials based on the Papuan context for ANBK preparation. Difficulties and opportunities for implementing ANBK in Papua through this process. Therefore, the results of this study are expected to help compile teaching materials that are more relevant to the local context and provide valuable suggestions for improving the quality of education in less-developed areas. The results of this study will be a theoretical and practical basis for efforts to improve the quality of education in Papua.

RESEARCH RESULTS AND DISCUSSION

Results

Several important findings related to literacy conditions and the development of teaching materials in Papua. The results of the study show that literacy conditions in Papua show quite complex challenges because literacy does not only include reading and writing skills but also a basic understanding of the social and cultural context. Literacy functions as a tool to empower people to understand and interact with the world.

In the implementation of ANBK in Papua, it was found that there were specific challenges that required special attention. These challenges are increasingly complex in the 3T areas, especially related to technological readiness and teacher training, which have a direct impact on student preparation. This shows that preparing facilities and training in remote areas requires special attention.

For example, the development of literacy teaching materials based on the Papuan context is very necessary to increase the relevance of the material to students' daily lives. Based on the study, literacy based on local culture can increase students' interest in reading because it connects learning with experiences they are familiar with. This is a solution to the challenge of low literacy in Papua, which is often influenced by the lack of contextual teaching materials. The study shows that most of the teaching materials available do not reflect the uniqueness of the culture, language, and traditions of the Papuan people. As a result, students have difficulty understanding the content of the material due to limited relevance to the context of their lives. Therefore, the teaching materials developed must contain local cultural elements, such as folklore, biodiversity, and Papuan traditional traditions.

ANBK demands literacy competencies that involve understanding informative and narrative texts, analytical skills, and drawing conclusions. To meet these demands, teaching materials must be designed to train students to think critically through texts

that are relevant to the Papuan environment. The materials developed must also be activity-based so that students are actively involved in the learning process. In addition, the language factor is one of the challenges in developing teaching materials. In Papua, there are more than 250 regional languages used by the community every day. Therefore, literacy teaching materials need to be designed in simple Indonesian but still respect the existence of local languages as learning supports.

Research also shows that developing literacy teaching materials based on the Papuan context can help students be better prepared to face ANBK. Students who are familiar with local texts tend to find it easier to understand literacy questions because they have been trained with relevant materials. This can improve their overall literacy achievement. In addition to cultural relevance, the availability of educational facilities and infrastructure is an important factor. Schools in Papua still face limited access to the internet, electricity, and computer devices, so the development of teaching materials must also consider these conditions. For example, printed teaching materials based on local contexts can be an effective alternative.

The involvement of local communities, including teachers, parents, and community leaders, is also key to the success of developing teaching materials. Their participation ensures that teaching materials truly reflect students' daily lives and the cultural values they wish to preserve. In addition, this involvement can increase a sense of ownership of the teaching materials, so that the development of contextual literacy teaching materials does not only focus on the content of the material but also on teaching strategies. Teachers need to be trained to use teaching materials based on local contexts effectively so that literacy learning becomes more meaningful for students.

Finally, this study emphasizes the importance of collaboration between the government, educational institutions, and local communities to develop appropriate teaching materials. This holistic approach is expected to be able to create teaching materials that not only support Papuan students' literacy but also increase awareness of the richness of local culture. Overall, the development of literacy teaching materials based on the Papuan context has great potential to improve students' literacy achievements.

By involving local cultural aspects, teaching materials not only help students be better prepared to face ANBK but also support the preservation of Papuan culture amidst the flow of modernization. In addition, the results of the needs analysis identified three main aspects of the development of teaching materials. First, the local context aspect shows the importance of teaching materials that are adaptive and appropriate to local needs. Second, the pedagogical aspect indicates that teaching materials must support independent learning through the presentation of materials that are clear, comprehensive, and easily accessible to students. Third, the evaluation aspect shows the importance of an evaluation system that does not only focus on the final result but includes the learning process and outcomes.

Discussion

Based on the research data above, there are several strategic steps, including The development of literacy teaching materials based on the Papuan context has a strategic role in improving students' literacy achievements, especially in areas with high cultural diversity (Risamasu, Pieter, & Gunada, 2023). By presenting materials that are relevant to everyday life, such as folklore, traditional traditions, and the natural environment of Papua (Saputra, Purwanty, & Lieung, 2022), students can feel more connected and motivated to learn. This approach also helps students understand the material in depth because it is by their experiences (Aristanto, Muflihah, Yuliani, Rumere, & Ullo, 2024).

Language is an important element in the development of literacy teaching materials in Papua. With the diversity of regional languages, teaching materials need to use simple Indonesian that is easy for students to understand (Ibda, 2017). However, the use of local terms and narratives must still be maintained to strengthen cultural connections and make it easier for students to understand the context. This not only increases the effectiveness of learning but also supports the preservation of local languages and cultures. Preparation for ANBK requires literacy skills that include text comprehension, critical analysis, and concluding. Papuan context-based teaching materials must be designed to train these skills through relevant texts and based on the lives of local people. For example, reading texts that describe Papua's biodiversity can be used to train information analysis skills, so that students not only learn literacy but also gain insight into the natural wealth of their region (Dewi, 2017).

Local community involvement is a key factor in the success of developing teaching materials (Arif, 2018). Teachers, parents, and community leaders can provide input to ensure that teaching materials truly reflect local cultural values. In addition, training for teachers is also needed so that they can use these teaching materials effectively. This approach ensures that the learning process becomes more meaningful for students (Arif, Munfa'ati, & Kalimatusyaroh, 2021).

The development of literacy teaching materials based on the Papuan context also has a long-term impact on cultural preservation (Arif, Aziz, Rahmayanti, & Dorloh, 2023). By integrating cultural elements into learning, students not only improve their literacy skills but also learn to appreciate and preserve their traditions. Collaboration between the government, educational institutions, and local communities is needed to support this initiative so that the teaching materials produced are not only relevant to ANBK but also support the overall quality of education in Papua.

In addition, research findings on literacy conditions in Papua show complexity that is in line with the views of experts. As stated by Tasrif & Syaifullah (2022), literacy is a cultural practice rooted in social, cultural, and political contexts, not just technical skills. This is reinforced by the opinion of Murtadho (2022) who emphasized the importance of adaptive modules equipped with instructions for use to facilitate the learning process, which is very relevant to conditions in Papua.

Regarding the three main aspects found in the needs analysis, the identified local context aspects support research by (Rahmawati et al. 2021) and (Hidayat and Putri 2020)

on the importance of adaptive teaching materials that are appropriate to local needs. The pedagogical aspects found strengthen the opinion of (Rahmawati et al. 2021) that effective teaching materials must support independent learning. Meanwhile, the evaluation aspects revealed are in line with the views of Ratumanan & (Rosmiati, 2020) and (Hidayat and Rahayu, 2021) on the importance of a comprehensive evaluation system.

In the context of the teaching materials development strategy, the results of the study indicate the importance of integrating curriculum demands with the local Papuan context, which is in line with research (Wibowo et al. 2021). The identified self-assessment system supports the proposal (Fauzi et al. 2021) regarding the importance of student self-evaluation. The findings regarding the suitability of the ANBK grid strengthen the results of research (Gunanto et al. 2021) and (Amiruddin et al. 2022) which emphasize the importance of paying attention to the question grid and local context in developing teaching materials.

CONCLUSION

Based on the results of this study, the development of teaching materials in Papua cannot be done using the national standard method directly. Literacy practices in Papua are a much more complex phenomenon than just the technical ability to read and write but are closely tied to the diverse local socio-cultural context. These results refute the general assumption that national education standards can be applied widely throughout Indonesia.

This study confirms and strengthens the findings of Tasrif & Syaifullah (2022) and Murtadho regarding the importance of cultural context in literacy development. However, this study also contributes a new perspective by integrating three main components that have never been previously identified in the Papuan context, namely: a local context based on cultural wisdom, a pedagogical approach that supports independence, and a continuous formative evaluation system. The integration model of these three components provides a new framework for developing teaching materials for the 3T area.

This study has limitations in terms of coverage of the area which only focuses on areas in Papua and is limited to the elementary education level. Further research is needed with a wider geographical scope, involving various levels of education, and considering the diversity of tribes and languages in Papua to gain a more comprehensive understanding. With more in-depth research, it is hoped that it will produce a more effective teaching material development policy that is on the unique needs of each region of Papua.

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