Effectiveness of Multicultural-Based Learning Media for Primary Schools

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Abstract. This study examines the effectiveness of multicultural-based learning media in enhancing students' understanding of cultural diversity and social harmony. The research was conducted through observations, interviews, and document analysis, revealing increased student engagement, improved tolerance, and better conceptual retention. Findings indicate that integrating multicultural content into digital learning fosters inclusivity, strengthens national identity, and enhances student comprehension. The study aligns with theories on culturally responsive teaching and multimedia learning, demonstrating that well-structured multicultural media reduce cognitive load and improve learning outcomes. These results suggest the need for systematic curriculum integration and further research on long-term impacts across diverse educational contexts.

Keywords: Multicultural education, Learning media, Cultural diversity, Primary schools, Inclusive learning environment

1 Introduction

Indonesia is one of the most multicultural countries in the world [1]. With approximately 16,056 islands [2], Indonesia is home to more than 271 million people as of 2020 [3], consisting of around 500 ethnic groups [4] and speaking 652 different languages [5]. Furthermore, Indonesians adhere to various religions and beliefs, including Islam, Catholicism, Protestant Christianity, Hinduism, Buddhism, Confucianism, and indigenous faiths. Given this diversity, fostering a sense of solidarity and unity is crucial to maintaining national cohesion. Community solidarity is an essential foundation for Indonesia's success, as disunity and prioritizing individual interests over collective well-being may hinder the realization of the national ideals stated in the third principle of Pancasila. As citizens, embracing the motto "Bhinneka Tunggal Ika" (Unity in Diversity) is fundamental in promoting tolerance and cooperation among diverse groups [6].

Multicultural education in Indonesia functions as a strategic approach to instilling awareness and appreciation of social, cultural, ethnic, and religious values. Rooted in the nation's foundational ideology, Pancasila, this educational framework underscores the importance of tolerance, mutual respect, and harmonious coexistence among diverse communities [7]. By incorporating multicultural perspectives into the curriculum, education serves as a powerful medium for fostering inclusivity and reducing societal divides.

The implementation of multicultural education plays a pivotal role in enhancing the quality of learning, particularly by tailoring curricula to reflect students' diverse backgrounds and lived experiences. A well-integrated multicultural approach makes learning more meaningful by allowing students to connect their personal experiences with broader societal contexts. This pedagogical strategy promotes higher levels of student engagement, encouraging active participation in discussions, collaborative projects, and experiential learning that incorporate diverse cultural viewpoints [8]. Consequently, this engagement nurtures intercultural competence, equipping students with the ability to navigate Indonesia's multicultural society with empathy and adaptability [9].

In addition, multicultural-based learning media serves as a vital instrument in expanding students' understanding of public life and social interactions [10]. Given Indonesia's extensive cultural diversity, viewing this plurality as a national strength rather than a challenge can significantly contribute to fostering inclusivity and social cohesion. While Indonesia's rich cultural landscape presents complexities in shaping a unified national identity, integrating multicultural perspectives into education from an early age is essential. Early exposure to multicultural education helps young learners develop respect for cultural differences, fostering a mindset of openness, empathy, and appreciation for diversity that will benefit them in both national and global contexts.

At the elementary school level, students are at a formative stage of cognitive and social development, making it an ideal period to instill values of respect, empathy, and mutual understanding [11]. Learning media that integrate multicultural perspectives can provide students with meaningful experiences, helping them navigate cultural differences in their everyday lives. By engaging with culturally diverse content, students can develop awareness of societal pluralism and cultivate positive attitudes toward individuals from various backgrounds.

Moreover, fostering cultural literacy at an early stage can play a significant role in reducing social prejudices and stereotypes. When students are introduced to diverse traditions, languages, and customs through interactive and digital learning tools, they gain a deeper understanding of Indonesia's rich heritage. This approach not only enhances their knowledge of cultural variations but also equips them with the skills needed to interact harmoniously within a diverse society. Therefore, integrating multicultural-based learning media into elementary education is vital for nurturing socially responsible and culturally competent individuals.

Multiculturalism originates from the combination of "multi" (many), "culture" (culture), and "ism" (ideology or belief system). It embodies the principle of recognizing human equality within diverse social structures, fostering an environment where individuals feel respected and share a collective responsibility for maintaining harmony [12]. Emphasizing the importance of acknowledging and valuing differences is essential in cultivating social unity, as disregarding multicultural realities can lead to divisions and societal conflicts [13].

In response to technological advancements, education must continuously evolve by incorporating innovative and dynamic learning strategies. Learning media plays a crucial role in enhancing student engagement, transforming lessons into more interactive and effective experiences [14]. By utilizing well-designed instructional media, educators can implement differentiated teaching methods that accommodate various learning styles, ultimately leading to improved academic outcomes [15]. Furthermore, the integration of digital and multimedia-based learning tools promotes accessibility and inclusivity in education, ensuring that students from diverse backgrounds receive equitable learning opportunities tailored to their specific needs [16].

Therefore, the development and implementation of multicultural-based learning media are imperative for fostering an inclusive and tolerant society. By embedding multicultural principles

within educational practices, students can gain a deeper appreciation of Indonesia's rich cultural heritage while developing critical thinking and social skills necessary for global citizenship.

2 Research method

This study adopts a qualitative approach, focusing on detailed procedural execution. Data were collected through interviews, observations, and document analysis, with each method carefully structured to ensure comprehensive insights. The research subjects consisted of individuals directly involved in multicultural education, including teachers, students, and educational policymakers.

Interviews were conducted using a semi-structured format, allowing participants to elaborate on their experiences while ensuring consistency in key discussion points. Observations took place in classroom settings, where student interactions, engagement levels, and teaching strategies were documented systematically. Meanwhile, document analysis involved reviewing lesson plans, instructional materials, and policy documents to identify patterns and alignments with multicultural education principles.

Data analysis followed Miles and Huberman's interactive model, involving systematic data organization, representation, interpretation, and validation to ensure credibility [17]. The descriptive nature of this research aimed to construct a clear depiction of the educational process, explain the dynamics of multicultural-based learning, and categorize key findings into relevant thematic groups [19]. Rather than testing hypotheses, this study sought to uncover deeper insights into how multicultural learning media influences student engagement and understanding [18].

3 Results and Discussion

3.1 Results

The findings of this study highlight the positive impact of multicultural-based learning media on students' cognitive, social, and emotional development. The implementation of such media not only improved students' conceptual understanding of cultural diversity but also fostered a more inclusive and harmonious learning environment.

Observations in the classroom showed a notable increase in student participation. Learners were more eager to take part in discussions, express their perspectives, and collaborate with peers on multicultural-themed projects. The integration of digital and interactive learning media provided students with more engaging and relatable content, making them more active in the learning process. This was particularly evident in group activities where students worked together to explore different cultural traditions, historical narratives, and contemporary issues related to diversity.

Interviews with teachers revealed that students exhibited a deeper understanding and appreciation of Indonesia's diverse cultural landscape. Many students, who initially had limited knowledge of other cultural traditions, became more open to learning about different ethnic groups, languages, and customs. Teachers noted that multicultural-based media helped break down stereotypes and encouraged students to view cultural differences as a source of enrichment rather than division.

The study also found that students displayed enhanced social skills, particularly in demonstrating tolerance and empathy toward peers from different backgrounds. Through exposure to multicultural narratives, role-playing activities, and multimedia presentations, students developed a stronger sense of respect for others. Teachers reported that conflicts and misunderstandings in the classroom were reduced as students became more accepting of different viewpoints and traditions.

Document analysis further confirmed that lessons incorporating multicultural elements led to better retention of information. Compared to traditional teaching methods, which often relied on rote memorization, the use of interactive multicultural media encouraged meaningful learning. Students were able to recall and apply concepts more effectively in discussions and assessments, indicating a deeper level of understanding.

Overall, the study demonstrates that multicultural-based learning media is an effective pedagogical tool for fostering cultural awareness, improving student engagement, and promoting social harmony. By integrating diverse perspectives into the learning process, students not only acquire knowledge about cultural diversity but also develop essential social skills that prepare them to navigate a multicultural society.

3.2 Discussion

These findings are consistent with previous research that highlights the significant role of multicultural education in fostering inclusivity and promoting cross-cultural understanding among students [20]. The results reaffirm Tilaar's perspective, which asserts that incorporating multicultural principles into educational settings can contribute to strengthening national identity and fostering social cohesion within diverse societies [6]. By embracing multicultural education, schools can create a more inclusive learning environment where students from different cultural backgrounds feel valued and respected.

Furthermore, the findings align with the arguments presented by Banks, who emphasized that multicultural education plays a crucial role in addressing social inequalities by providing equitable learning opportunities for all students, regardless of their ethnic, religious, or cultural backgrounds [7]. Banks also highlighted that when students are exposed to multicultural perspectives, they develop a greater sense of belonging and are more likely to actively engage in classroom discussions and collaborative learning experiences. This engagement not only enhances academic achievement but also cultivates essential social skills, such as empathy, critical thinking, and intercultural communication.

Moreover, the study's results reinforce the idea that integrating multicultural elements into the curriculum allows students to develop a more comprehensive understanding of societal diversity and the challenges associated with maintaining social harmony. By presenting diverse perspectives in education, students are better prepared to navigate real-world situations where cultural differences play a significant role. Thus, the findings underscore the importance of continuing efforts to implement multicultural-based learning strategies to support both academic success and social development.

In contrast to previous studies that argue digital learning tools may hinder direct cultural interactions [21], the findings of this research suggest that technology-enhanced multicultural media can, in fact, play a pivotal role in supporting student learning. The use of digital platforms and multimedia resources was observed to enrich students' understanding of diverse cultural perspectives by providing interactive and immersive learning experiences. Rather than

diminishing cultural engagement, these tools facilitated meaningful discussions, collaborative activities, and exposure to a wide range of cultural representations, ultimately reinforcing students' appreciation of multiculturalism. The study challenges Gorski's assertion that multicultural education initiatives often fail due to insufficient teacher training and a lack of resources [9]. In this case, teachers who participated in the study expressed confidence in their ability to integrate multicultural media into their lessons effectively. This suggests that when educators are provided with well-structured learning materials and adequate professional development opportunities, they can successfully implement multicultural education strategies. The positive outcomes observed in this research indicate that properly designed multicultural-based digital learning tools can help bridge potential gaps in teacher preparedness and resource availability, ensuring that students benefit from a well-rounded and culturally responsive education.

Overall, these findings highlight the potential of digital learning technologies to complement and enhance multicultural education rather than hinder it. By leveraging thoughtfully designed multicultural media, educators can foster cross-cultural understanding and engagement while maintaining the integrity of direct cultural interactions in the learning process. This study builds upon Gay's framework of culturally responsive teaching by illustrating how the integration of localized cultural content into multimedia-based instruction significantly enhances student learning outcomes [11]. By embedding elements of students' cultural backgrounds into digital learning materials, educators can create more meaningful and relatable learning experiences that foster deeper understanding and engagement. The findings underscore the importance of culturally relevant pedagogy in making education more inclusive and effective, particularly in diverse classroom settings.

This conclusion is further supported by Mayer's research on multimedia learning, which emphasizes the advantages of multimodal instructional strategies in improving knowledge retention and conceptual understanding [14]. The combination of visual, auditory, and interactive components in digital media aligns with cognitive learning theories that suggest students process and retain information more effectively when presented through multiple modes. The study's results indicate that multimedia-enhanced learning not only aids comprehension but also helps students develop a stronger connection to the material by engaging with culturally familiar contexts.

Additionally, the findings are consistent with Heafner's research on digital learning, which highlights the role of multimedia in increasing student engagement, particularly in multicultural education settings [16]. The study demonstrates that digital tools can serve as effective facilitators of multicultural education by promoting active participation, collaborative learning, and exposure to diverse perspectives. These results reaffirm the potential of multimedia-based approaches to bridge cultural gaps and enhance the overall quality of learning experiences in diverse educational environments.

The effectiveness of multicultural-based learning media can also be examined through the framework of cognitive load theory, which posits that meaningful learning occurs when instructional materials are designed to optimize cognitive processing [22]. In this study, the integration of structured, engaging multimedia content likely minimized extraneous cognitive load—reducing unnecessary mental effort and enabling students to focus on essential concepts and social interactions. By presenting cultural information through a combination of visual, auditory, and interactive elements, digital multicultural media facilitated more efficient cognitive processing, making it easier for students to absorb and retain information.

This interpretation aligns with the findings of Sweller et al., who highlight the importance of instructional design in promoting effective learning [23]. According to cognitive load theory,

reducing extraneous load while enhancing germane load—cognitive processes that contribute to deeper understanding—leads to improved retention and comprehension. In the context of this study, digital multicultural media may have provided students with a well-balanced cognitive experience, where the complexity of cultural content was made more accessible through clear, engaging, and interactive formats. By leveraging multimedia elements, the instructional design likely supported dual-channel processing, as suggested by Mayer's cognitive theory of multimedia learning. The simultaneous use of visual and auditory stimuli helped students process information more efficiently, reinforcing their understanding of cultural diversity and social harmony. These findings underscore the importance of designing multicultural learning media that not only conveys content effectively but also enhances cognitive engagement for deeper, more meaningful learning experiences.

Furthermore, the findings challenge the traditional assumption that early exposure to multicultural concepts might lead to cognitive overload or confusion among young learners. Instead, the study aligns with research by Bennett, who argues that introducing multicultural education at an early stage fosters stronger cultural awareness and adaptability [24].

Another important implication of this research is the role of teacher facilitation. While earlier studies have pointed out challenges in teacher preparedness for multicultural education [25], this study suggests that well-designed multicultural media can bridge this gap by providing structured, ready-to-use content that guides both educators and learners. This is consistent with Sleeter and Grant's findings on the necessity of teacher support systems in multicultural classrooms [26].

Additionally, the study contributes to the ongoing debate on the effectiveness of digital learning environments for cultural education. While some scholars argue that digital tools may limit face-to-face social interactions essential for multicultural engagement [27], this research suggests that digital platforms can, in fact, enhance cultural learning when properly designed. Similar findings were reported by Zhao and Frank, who observed that digital collaboration fosters global cultural exchange and understanding among students [21].

From a policy perspective, these results highlight the need for curriculum developers to integrate multicultural content into digital learning frameworks systematically. Policymakers should consider embedding culturally responsive media into national curricula to ensure widespread accessibility and effectiveness. This approach aligns with research by Nieto, who advocates for institutionalized multicultural education policies to promote educational equity [20].

Future research should explore long-term effects and scalability across different educational settings. It is essential to examine whether the positive impacts observed in this study persist over time and whether similar outcomes can be achieved in regions with different sociocultural dynamics. Furthermore, cross-national comparative studies could provide insights into best practices for implementing multicultural-based learning media on a global scale.

4 Conclusion

The study confirms that multicultural-based learning media significantly enhance students' cultural understanding, social harmony, and engagement. The findings highlight the effectiveness of integrating multicultural content into digital learning, supporting inclusive education and national identity. Additionally, structured multicultural media reduce cognitive

load and improve conceptual retention. These results emphasize the need for systematic curriculum integration and further research on long-term impacts.

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