

Teaching Materials Design for Cultural Diversity in Samarinda

Siti Marfuah, Muhammad Azmi, Aulia Rahuma, Andri Ramadhan, Elisa

History Education Department, Universitas Mulawarman, Samarinda, Indonesia

siti.marfuah@fkip.unmul.ac.id

Received	Accepted	Published
22/03/2025	13/06/2025	30/06/2025

Abstract

This study aims to design teaching materials that represent the cultural diversity in Samarinda using a design research method. This research focuses on expert evaluation to measure the product's feasibility. The results from the expert evaluation indicate that the developed teaching materials have a high level of cultural relevance and accuracy. However, some improvements were recommended, such as using the more inclusive term "ethnic groups" and adding more culturally representative images. In terms of language clarity, the materials received a perfect score, deemed easy to understand and aligned with linguistic standards. The educational effectiveness was rated favorably, with suggestions to incorporate interactive elements like project-based activities to enhance student engagement, in line with the Merdeka Curriculum. The sequential structure of the content was also highly praised for supporting a structured learning process. Overall, the experts concluded that the teaching materials are highly suitable and viable as a learning resource to promote the understanding and appreciation of cultural diversity among students.

Keywords: Cultural diversity, Teaching materials, Development, Local wisdom, Samarinda

Abstrak Penelitian ini bertujuan untuk merancang materi ajar yang merepresentasikan keragaman budaya di Samarinda, dengan menggunakan metode penelitian desain. Penelitian ini berfokus pada evaluasi ahli untuk mengukur kelayakan produk. Hasil evaluasi dari para ahli menunjukkan bahwa materi ajar yang dikembangkan memiliki tingkat relevansi dan keakuratan budaya yang tinggi, meskipun terdapat beberapa rekomendasi perbaikan, seperti penggunaan istilah "kelompok etnis" yang lebih inklusif dan penambahan gambar yang lebih representatif secara budaya. Dari segi kejelasan bahasa, materi ajar mendapatkan skor sempurna karena dinilai mudah dipahami dan sesuai dengan standar linguistik. Aspek efektivitas pendidikan dinilai baik, dengan saran untuk menambahkan elemen interaktif seperti kegiatan berbasis proyek guna meningkatkan keterlibatan siswa sejalan dengan Kurikulum Merdeka. Struktur materi yang sekuensial juga dinilai sangat baik karena mendukung proses belajar yang terstruktur. Secara keseluruhan, para ahli menyimpulkan bahwa materi ajar ini sangat sesuai dan layak digunakan sebagai sumber belajar untuk mempromosikan pemahaman dan penghargaan terhadap keragaman budaya di kalangan siswa.

Kata kunci: Keragaman budaya, Bahan ajar, Pengembangan, Kearifan lokal, Samarinda



This work is licensed under a
[Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).

INTRODUCTION

Indonesia's cultural diversity provides a rich foundation for developing tolerance and multiculturalism within the educational sphere. Samarinda, the capital of East Kalimantan, exemplifies this diversity as a melting pot of ethnicities, including the Dayak, Javanese, Buginese, and Banjar communities (Arwin et al., 2023). This unique cultural landscape offers educators a valuable opportunity to create teaching materials that celebrate and reflect on local diversity, thus enabling students to understand and respect cultural differences from an early age. Such culturally responsive teaching materials have been shown to enrich the learning experience and foster positive social values such as inclusivity and mutual respect (Erianjoni, 2017; Djuwita & Muktadir, 2023).

Research indicates that culturally relevant materials can significantly impact students' understanding of the local culture and enhance their appreciation of national cultural values. Santoso and Wuryandani (2020) found that local wisdom-based teaching materials helped students in various Indonesian cities to connect more deeply with their cultural heritage. In Samarinda, where maintaining local cultural identity is essential, integrating cultural diversity into the curriculum can strengthen students' cultural resilience and foster a more engaged learning environment (Suwarni, 2015). By connecting educational content to students' social and cultural contexts, these materials can enhance students' engagement and interest.

In addition to the local wisdom, technological advancements have opened new avenues for developing multicultural digital learning resources. Pramitasari (2019) highlighted that digital teaching materials incorporating local cultural elements, especially in secondary education, provide students with an interactive learning experience that resonates with their backgrounds. This approach is increasingly relevant in today's digital era, aligning with Indonesia's "Merdeka Belajar" (Freedom to Learn) initiative, which emphasizes inclusive and meaningful education through modernized teaching approaches (Darniyanti & Filahanasari, 2023). Incorporating technology into teaching materials that reflect Samarinda's diverse culture can extend the reach of cultural education and make learning more dynamic and accessible.

Problem-based learning (PBL) has also proven effective in developing culturally responsive teaching materials. Wiarta (2022) suggested that PBL allows students to interact directly with real-world cases that reflect their cultural environments, thereby encouraging critical thinking and collaboration. Beyond cognitive skills, PBL enhances students' understanding of social values such as tolerance and respect for diversity. This method has been shown to foster cooperative learning and to promote empathy and mutual understanding, creating a culturally inclusive learning atmosphere that values both unity and diversity.

Moreover, developing teaching materials that focus on cultural diversity has a positive effect on students' social awareness and patriotism. Laila and Damariswara (2022) demonstrated that introducing students to Indonesia's cultural richness could instill a strong sense of national pride and character. This aligns with the findings of Kasrina and Ansori (2018), who reported that materials highlighting cultural diversity, especially in the form of handouts or modules, effectively boost student motivation and interest in learning. This underscores the role of culturally centered materials in promoting a sense of belonging and appreciation for one's heritage.

Based on these insights, this study aimed to develop teaching materials that authentically represent Samarinda's cultural diversity using the ADDIE model, focusing specifically on the stages of needs analysis, product development, and expert evaluation. This structured approach allows for the creation of pedagogically sound and culturally relevant resources that support an inclusive learning environment in which students can explore and appreciate the diversity of their cultural heritage (Martatiyana, 2023; Darmawati, 2016). By bridging cultural education with digital tools, this research contributes to the discourse on multicultural education and provides a framework that can be applied across Indonesia to strengthen cultural representation in curricula, ultimately fostering open-minded, respectful, and appreciative diversity (Chaudhury et al., 2016; Chaudhury et al., 2019).

METHOD

This study uses an Educational Design Research approach, which was carried out through three main stages to develop teaching materials about Samarinda's cultural diversity. The process began with the needs analysis stage, where data were collected through observations and interviews with teachers and students at SMA Negeri 10 Samarinda to identify specific needs and learning challenges. Based on these findings, the research proceeded to the product development stage, where culturally relevant teaching materials were designed and constructed by integrating visualizations relevant to the local context. The final stage was expert evaluation, where experts in education and cultural studies reviewed the draft materials to assess their accuracy, relevance, and effectiveness, with their feedback then used for iterative product refinement.

RESULT AND DISCUSSION

Need Analysis

The findings at SMA Negeri 10 Samarinda indicate that while classrooms are equipped with essential resources, such as projectors, limited Wi-Fi access hinders students' ability to engage in interactive digital learning. This mirrors the challenges found in other studies on technology access in schools. For example, Erianjoni (2017) highlighted that restricted Internet

access often limits students' engagement in technology-based assignments, affecting digital literacy and learning flexibility. Similar to Darniyanti and Filahanasari's (2023) research on technology-supported learning in Indonesian schools, which found that inadequate WiFi accessibility disrupts the efficacy of digital tools in enhancing learning engagement, the limited internet access at SMA Negeri 10 suggests that digital readiness remains a crucial area for improvement.

The diverse learning preferences observed among students in SMA Negeri 10 reflect findings from broader research, indicating that accommodating various learning styles enhances inclusivity. Santoso and Wuryandani (2020) asserted that teaching materials that integrate multiple modalities (visual, auditory, and kinesthetic) can better meet students' unique needs and improve their engagement. Moreover, Pramitasari (2019) found that digital and visual materials enriched with cultural elements have a significant positive impact on students' interest and comprehension. In line with these studies, the need for adaptive teaching resources at SMA Negeri 10 supports the broader trend of integrating multimodal resources to address individual learning preferences and backgrounds.

The transition to the Merdeka curriculum has been challenging for students accustomed to structured teacher-led learning environments. This challenge is consistent with the findings of Laila and Damariswara (2022), who reported that the shift to a more flexible, student-centered curriculum can lead to initial resistance and adaptation difficulties, as students may struggle with increased independence. Similarly, Suwarni (2015) emphasized the importance of gradual adaptation to more autonomous learning models, suggesting that supportive resources, particularly those with a relatable cultural context, can help bridge the gap between traditional and flexible curricula. This supports the need identified in SMA Negeri 10 for resources that facilitate smoother transitions by linking curriculum content to students' cultural and social experiences.

The need for enriched educational resources in SMA Negeri 10, especially textbooks with detailed visuals and interactive elements, aligns with the findings of Wiarta (2022) and Erianjoni (2017), who argued that culturally relevant and visually rich teaching materials foster a deeper connection to the curriculum. According to Kasrina and Ansori (2018), providing culturally resonant materials can enhance students' interest and support their cultural identity, especially in diverse environments, such as Samarinda. This reinforces the importance of developing textbooks that not only cover theoretical knowledge, but also include interactive components and cultural references to keep students engaged.

While teachers at SMA Negeri 10 encourage the use of digital tools such as Canva for assignments, students face challenges due to limited internet access. This aligns with the findings of Ma (2023), who noted that limited technological support restricts students' potential to fully engage with digital learning methods, thereby hindering digital literacy. Leibold et al. (2022) further highlight the importance of accessible technology in fostering skills needed for modern educational contexts. In comparison, the limited technological infrastructure in SMA Negeri 10 underscores the need for improved digital access and support systems, enabling students to develop the necessary digital competencies and actively participate in technology-driven learning activities.

Product Development

The teaching materials were designed to reflect the unique cultural landscape of Samarinda, where ethnic groups such as the Dayak, Javanese, Bugis, and Banjar coexist. Integrating local cultural references into educational content allows students to connect their learning with their daily lives, thereby fostering a sense of cultural pride and relevance. Research indicates that culturally grounded materials make learning more meaningful and encourage students to engage actively. According to Santoso and Wuryandani (2020), embedding cultural values in educational resources significantly enhances students' awareness of their heritage, which is particularly beneficial for promoting tolerance and mutual respect in diverse communities.

This culturally relevant approach not only aids in connecting students with their heritage, but also enriches their educational experience by providing real-life applications of abstract concepts. For instance, discussing local cultural practices and values along with academic content allows students to see the relevance of learning in their immediate environment. This contextualization aligns with the findings of Erianjoni (2017), who argued that students are more engaged and motivated when the content mirrors their lived experiences. Through this localized approach, students are encouraged to explore and appreciate their cultural background, strengthen their sense of identity, and understand social diversity.

Visual aids, such as images, illustrations, and symbols reflective of Samarinda's diverse culture, are heavily featured in the teaching materials. By integrating visuals connected to students' cultural surroundings, these resources provide a richer and more engaging learning experience. Pramitasari (2019) found that visual elements based on the local context help enhance students' memory retention and overall comprehension, as they can better relate to the content. The use of high-quality visuals also helps clarify complex topics, ensuring that students

not only see themselves reflected in the material, but also understand and retain information more effectively.

In addition to visual elements, teaching materials include numerous practical applications such as case studies, examples, and real-life scenarios drawn from local culture. For instance, students may explore social study concepts by examining local community practices or discussing how specific cultural traditions relate to broader societal values. This method promotes an understanding of theoretical concepts by directly connecting them to students' daily lives, thereby increasing their relatability and interest. Laila and Damariswara (2022) affirmed that materials with practical, relatable applications foster active engagement, as students can observe the direct impact of their learning on their own lives.

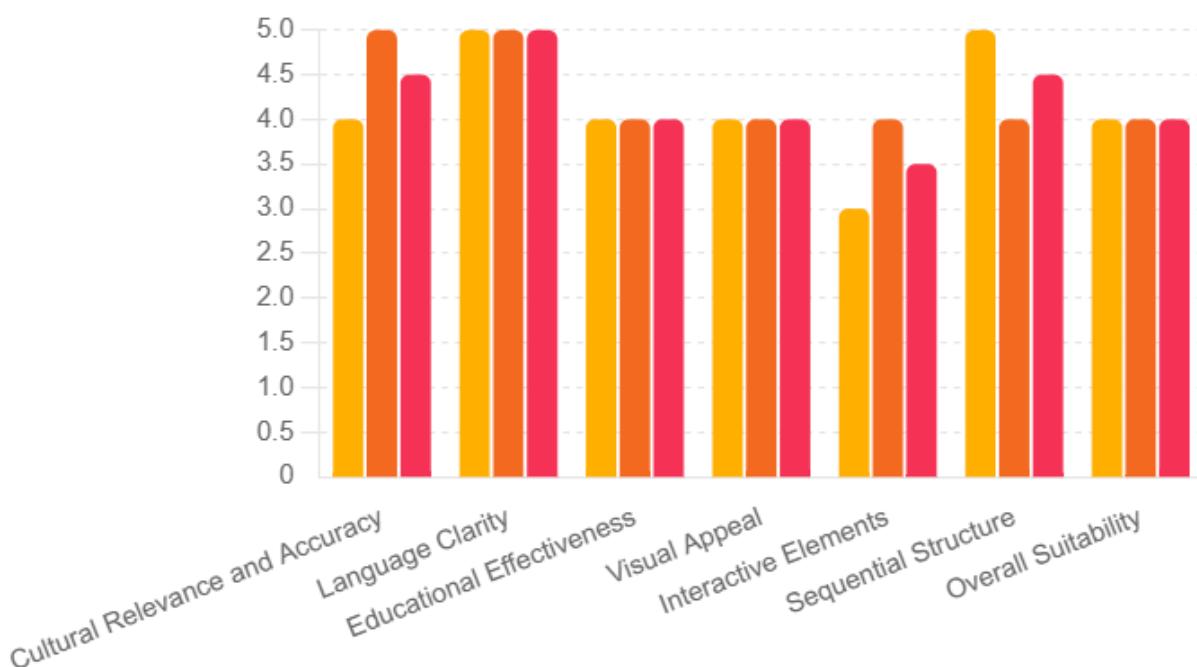
The teaching materials incorporated interactive elements, including infographics, audiovisual content, and digital exercises, to cater to diverse learning styles and to make learning more dynamic. These multimedia components allow students with varying preferences—visual, auditory, and kinesthetic—to engage with material in ways that best suit them. For instance, infographics summarize complex information in a visually appealing format, whereas audiovisual content brings cultural stories and historical events into life. According to Leibold et al. (2022), multimedia elements in teaching materials not only enhance understanding, but also create a more inclusive classroom environment, allowing all students to participate actively.

By incorporating a range of interactive elements, these materials can create opportunities for deeper engagement and exploration. Students are encouraged to participate actively in their learning by engaging in exercises, quizzes, and media that reinforce key concepts. This interactive approach aligns with Pramitasari's (2019) finding that handson multimedia resources are highly effective at supporting learning retention. Through these interactive tools, students are not only passive recipients of information but become active participants in their education, enhancing their comprehension and

The materials were organized in a sequential and progressive structure to ensure that students could follow the learning process in a clear and systematic way. Each topic was presented in a step-by-step manner, starting with foundational concepts before moving on to more complex discussions. This approach allows students to gradually build their understanding, which supports cognitive development by introducing simpler ideas before progressing to more advanced content. Laila and Damariswara (2022) found that a sequential arrangement of content helps students to comprehend and retain information better, as they can see how one concept logically connects to the next.

This progressive structure also facilitated the students' understanding of each topic before advancement. The clear delineation between sections affords students the opportunity to thoroughly process each concept, which is fundamental for deep learning, particularly in complex subjects, such as cultural diversity. Pramitasari (2019) corroborated this approach by observing that progressively constructed learning enhances engagement and fosters increased confidence in students' material mastery. Through the implementation of structured progression, these materials aimed to enhance students' comprehension of cultural diversity in a comprehensive and substantive manner.

Expert Evaluation



The bar chart presents the expert evaluation scores for various criteria in the assessment of culturally relevant teaching materials. Each criterion was rated by two experts, Muhammad Rezky Noor Handy (Expert 1) and Dewicca Fatma Nadilla (Expert 2), with the scores for each criterion and an average calculated score.

The Language Clarity criterion received a perfect score of five from both experts, highlighting the material's accessibility and adherence to linguistic standards. Cultural Relevance and Accuracy were rated slightly differently, with a score of 4 from Expert 1 and 5 from Expert 2, resulting in an average of 4.5. This reflects a strong alignment with cultural values with room for minor adjustments. Both experts rated Educational Effectiveness at four, indicating that while the

material met pedagogical standards, additional enhancements could improve instructional engagement.

Visual Appeal was scored equally at 4 by both experts, suggesting that the material's visual aspects are generally effective, but may benefit from further refinement or added cultural specificity. Interactive Elements showed a slight disparity, with Experts 1 and 2 scoring 3 and 4, respectively. This difference suggests that, while interactive features are present, adding more features could increase engagement, especially for students with diverse learning styles.

For the Sequential Structure, Expert 1 rated it 5, indicating satisfaction with the logical progression of the content, while Expert 2 rated it 4. The average score of 4.5 implies that the material is well organized, supporting a structured learning experience. Finally, Overall Suitability received a consistent score of 4 from both experts, affirming the material's general appropriateness for educational purposes while acknowledging potential improvements.

Overall, the average scores reflected a positive evaluation, with minor recommendations for enhancing interactivity and visual appeal to align better with cultural and educational standards. Teaching materials are viewed as effective resources for promoting cultural understanding and inclusivity.

Feedback from Expert

Cultural experts provided comprehensive feedback on the appropriateness and accuracy of the local cultural content integrated into the teaching materials. Both experts, Muhammad Rezky Noor Handy and Dewicca Fatma Nadilla, expressed appreciation for the effort to reflect Samarinda's diverse ethnic composition, which encompasses Dayak, Javanese, Bugis, and Banjar communities. However, they observed that certain terminology, such as the use of "tribes," could be revised to more inclusive terms like "ethnic groups" to enhance the material's relevance and respectfulness. Handy recommended the inclusion of introductory sections on multiculturalism to provide students with a foundational understanding of cultural diversity in the global context. Both experts emphasized the significance of utilizing culturally representative images and proposed the addition of visuals that depict distinctive cultural activities and traditions specific to each community in Samarinda. These modifications were recommended to ensure that the material accurately represented cultural values and promoted inclusivity.

Educational experts evaluated the materials' alignment with pedagogical standards and assessed their potential to enhance student engagement and comprehension. They commended the material's language clarity, which was deemed appropriate for high school students, and adhered to Indonesian language rules (PUEBI), thereby ensuring that the students could readily

comprehend the content. However, Dewicca Fatma Nadilla proposed that the incorporation of interactive elements such as project-based activities or reflective questions would further engage students and facilitate their learning. Handy also emphasized the necessity for a sequential organization of concepts, beginning with foundational topics and progressing to more complex discussions. Both experts recommended the addition of practical exercises that promote critical thinking and personal reflection, which align effectively with the objectives of the student-centered learning approach of the Merdeka curriculum.

Following the expert feedback, several adjustments were made to improve the material's cultural relevance, educational effectiveness, and overall presentation. To enhance cultural representation, additional images and case studies depicting local cultural practices are integrated into the material. Introductory sections on multiculturalism were also added to provide students with context and to help them understand the significance of cultural diversity. The language was refined for clarity and a glossary was included for cultural and foreign terms to aid comprehension. Interactive components, including group activities and project-based tasks, were incorporated to encourage active participation and reflection on the students' cultural observations and experiences.

These refinements were made to prepare materials for broader implementation, ensuring that they met both cultural and educational objectives effectively. The final version of the material aligns closely with expert recommendations, making it a valuable resource for fostering cultural understanding, tolerance, and inclusivity among Samarinda students.

CONCLUSION

This study on the development of culturally relevant teaching materials to understand the diversity of Samarinda society underscores the importance of integrating local cultural elements into educational resources. Expert evaluations confirm that the materials effectively reflect Samarinda's multicultural landscape, bridging the gap between students' real-life cultural experiences and their classroom learning. By embedding cultural references and utilizing interactive elements, the materials not only enhance engagement, but also foster a sense of pride and respect for diversity among students.

Despite positive feedback, minor refinements were recommended, including enhancing the visual appeal and incorporating additional interactive features to cater to diverse learning styles. The structured sequential presentation of the content was praised to support students' gradual comprehension and retention. Overall, the final teaching materials demonstrated

significant potential as a valuable educational resource. This aligns with pedagogical standards, promotes cultural awareness, and prepares students for active participation in multicultural societies. This study contributes to the ongoing development of culturally responsive teaching practices by providing a model that integrates local cultural values into education across Indonesia and beyond.

REFERENCES

Arwin, A., Sutrisno, S., & Nurfitriani, N. (2023). Dampak kenaikan harga bahan bakar minyak terhadap elastisitas permintaan sembako di pasar sekitar kota Samarinda. *Journal of Business and Economics Research (JBE)*, 4(1), 109114. <https://doi.org/10.47065/jbe.v4i1.3012>

Basnet, M. (2024). Cultural diversity and curriculum. *Panauti J.*, 2, 19. <https://doi.org/10.3126/panauti.v2i1.66500>

Chaudhury, Z., Hossain, Z., & Gordon, E. (2019). Cultural diversity in undergraduate engineering education. *Journal of Global Education and Research*, 3(1), 1021. <https://doi.org/10.5038/2577509x.3.1.1044>

Cuc, M., et al. (2013). Educational strategies to promote cultural diversity. *Procedia Social and Behavioral Sciences*, 92, 220224. <https://doi.org/10.1016/j.sbspro.2013.08.663>

Darmawati, D. (2016). Model kepemimpinan kepala min 1 dan min 2 sekota Samarinda. *Syamil Jurnal Pendidikan Agama Islam (Journal of Islamic Education)*, 4(1). <https://doi.org/10.21093/sy.v4i1.537>

Darniyanti, Y., & Filahanasari, E. (2023). Pengembangan modul pembelajaran berbantu Canva mata pelajaran IPAS untuk mendukung Merdeka Belajar kelas IV di sekolah dasar. *Jurnal Basicedu*, 7(3), 563-577.

Djuwita, P., & Muktadir, A. (2023). Pengembangan bahan ajar muatan pelajaran PPKn berbasis Higher Order Thinking Skills untuk meningkatkan hasil belajar siswa kelas VI SD Negeri 49. *Jurnal Kajian Pendidikan Dasar*, 12(1), 30-40.

Erianjoni, E. (2017). Pengembangan materi ajar sosiologi tentang mitigasi bencana berbasis kearifan lokal di kota Padang. *Jurnal Socius: Journal of Sociology Research and Education*, 9(2), 25-38.

Jamilah, J., et al. (2024). The integration of local cultural arts in the context of teaching materials on the implementation of the Merdeka Belajar curriculum. *Journal of Education Research and Evaluation*, 8(2), 404413. <https://doi.org/10.23887/jere.v8i2.78359>

Kasrina, K., & Ansori, I. (2018). Pengembangan handout biologi materi keanekaragaman hayati untuk SMA kelas X. *Diklabio: Jurnal Pendidikan dan Pembelajaran Biologi*, 7(2), 132-142.

Laila, A., & Damariswara, R. (2022). Pengembangan bahan ajar subtema indahnya keragaman budaya dinegeriku untuk meningkatkan karakter cinta tanah air pada siswa kelas IV SD. *Jurnal Edukasi dan Ilmu Pendidikan*, 9(1), 102-115.

Leibold, N., Schwarz, L., & Gordon, D. (2022). Culturally responsive teaching in nursing education: a faculty development project. *Creative Nursing*, 28(3), 154160. <https://doi.org/10.1891/cn20210044>

Ma, X. (2023). The meaning, value, and realization of Internet-based culturally responsive teaching. *Applied Mathematics and Nonlinear Sciences*, 9(1). <https://doi.org/10.2478/amns.2023.2.00167>

Miftah, M., et al. (2016). Multicultural Education in the Diversity of National Culture. *Qijis (Qudus International Journal of Islamic Studies)*, 4(2), 167. <https://doi.org/10.21043/qijis.v4i2.1766>

Nursafitri et al. (2023). Development of a local content curriculum based on the Merdeka curriculum for high schools in East Kalimantan Province. *Qalamuna Jurnal Pendidikan Sosial Dan Agama*, 15(2), 695704. <https://doi.org/10.37680/qalamuna.v15i2.2933>

Ola, F. (2022). Community behavior related to covid19 in samarinda city households. *Kne Life Sciences*. <https://doi.org/10.18502/cls.v7i2.10286>

Pramitasari, A. (2019). Pengembangan materi ajar BIPA bermuatan kearifan budaya lokal kota Pekalongan. *National Seminar of PBI (English Language Teaching) Proceedings*, 3(1), 90–100.

Santoso, R., & Wuryandani, W. (2020). Pengembangan bahan ajar PPKn berbasis kearifan lokal guna meningkatkan ketahanan budaya melalui pemahaman konsep keberagaman. *Jurnal Ketahanan Nasional*, 26(2), 125–137.

Suwarni, E. (2015). Pengembangan buku ajar berbasis lokal materi keanekaragaman labalaba di kota Metro sebagai sumber belajar alternatif biologi untuk siswa SMA kelas X. *BIOEDUKASI: Jurnal Pendidikan Biologi*, 13(2), 85–95.

Wiarta, I. W. (2022). Bahan ajar digital interaktif berbasis problem-based learning materi keragaman budaya. *Jurnal Penelitian dan Pengembangan Pendidikan*, 9(1), 45–57.