Lentera Pendidikan : Jurnal Ilmu Tarbiyah dan Keguruan

Vol. 27, No. 2, December 2024, pp. 335-347 ISSN: 1979-3472 (Print) 2580-5223 (Online) Doi: https://doi.org/10.24252/lp.2024v27n2i5

The Development of Teaching Materials for Islamic Religious Education Courses Based on Local Wisdom at Public State Universities

Usman^{1*}, Bahraeni², Nurhilaliyah³, Ananda Fathur Rahman⁴

^{1,2}Universitas Islam Negeri Alauddin Makassar
 ³Universitas Negeri Makassar
 ⁴Universitas Negeri Yogyakarta
 Email: usman.tarbiyah@uin-alauddin.ac.id^{1*}, bahraeni@uin-alauddin.ac.id², nurhilaliyah@unm.ac.id³, anandafathurrahman123@gmail.com⁴

Received February 29, 2024; Revised December 23, 2024; Accepted December 24, 2024; Available Online: December 31, 2024

Abstract:

This study aims to develop open educational materials for Islamic Religious Education (PAI) at public universities, grounded in diverse local values. The focus is on the creation and validation of teaching materials, incorporating local wisdom from Sulawesi and Mataram regions. The research adopts a Research and Development (R&D) approach, utilizing a 4-D model of development (Define, Design, Develop, Disseminate). The teaching materials, which integrate local values from Sulawesi (siri', pacce', pemmali, and pappaseng) and Mataram (karma, sesengak, perteke, and lelakak), were tested at a state university. The development process involved a team of validators, and the results demonstrated high validity. The findings suggest that the development of teaching materials integrating Islam with relevant local values can provide a more contextualized and meaningful educational experience for students. Consequently, this study is expected to offer guidance for other universities in formulating open PAI materials that effectively combine Islamic principles with local cultural values.

Abstrak:

Penelitian ini bertujuan untuk membuat bahan terbuka Pendidikan Agama Islam (PAI) di perguruan tinggi negeri berdasarkan nilai-nilai lokal yang beragam. Penelitian ini berfokus pada pembuatan bahan ajar pada Universitas Negeri Makassar dan Universitas Mataram yang berintegrasi pada nilai lokal dari kedua daerah. Penelitian ini menggunakan pendekatan Penelitian dan Pengembangan (R&D), dan menggunakan model pengembangan 4-D (Define, Design, Develop, Disseminate). Dua perguruan tinggi melakukan uji coba bahan ajar, yang menggabungkan kearifan lokal dari dua daerah - Sulawesi (siri', pacce', pemmali, dan pappaseng) dan Mataram (karma, sesengak, perteke, dan lelakak). Bahan terbuka dikembangkan oleh tim validator, dan hasilnya menunjukkan validitas yang tinggi. Dengan demikian, pengembangan bahan ajar dengan mengambil pendekatan yang mengintegrasikan Islam dengan nilai-nilai lokal yang relevan akan menghasilkan pengalaman pendidikan yang lebih kontekstual dan bermakna bagi siswa. Oleh karena itu, penelitian ini diharapkan dapat memberikan Arahan bagi perguruan tinggi lain dalam merumuskan bahan terbuka PAI yang menggabungkan Islam dengan nilai-nilai budaya lokal.

Kevwords:

Islamic Religious Education, Local Wisdom, Teaching Materials, Validity

How to Cite: Usman, Bahraeni, Nurhilaliyah, & Rahman, A. F. (2024). The development of teaching materials for islamic religious education courses based on local wisdom at public state universities. *Lentera Pendidikan : Jurnal Ilmu Tarbiyah dan Keguruan*, 27(2), 335-347. https://doi.org/10.24252/lp.2024v27n2i5.

Copyright 2024 © The Author(s)

The work is licensed under a <u>Creative Commons Attribution-NonCommercial 4.0 International</u> (CC BY-NC 4.0)



Introduction

Islamic Religious Education (PAI) plays a crucial role in shaping the character, morals, and spirituality of students in public universities (Saada, 2023; Samad, Gade, Basri, Silahuddin, & Ariani, 2023). In the current era of rapid globalization, it is essential to adopt relevant and contextual methods in the development of teaching materials (Sinaga, Situmorang, & Hutabarat, 2019; Hakim, Efwinda, Damayanti, Syam, Mutmainah, & Norsaputra, 2023; Negoro, Rusilowati, & Aji, 2023). One increasingly popular approach is the integration of local wisdom. Local wisdom encompasses values, cultures, and traditions that are specific to certain communities and provide practical insights into life (Aricindy, Wasino, & Wijaya, 2023; Sari, Sumiyadi, Sunendar, & Mulyati, 2023; Sookkaew, Chaikaew, & Saephoo, 2023). These elements serve as a foundation for developing relevant and contextualized educational content that meets the needs of students. Utilizing this approach is vital for ensuring that Islamic Religious Education is not only theoretically rich but also closely connected to the lived experiences and local cultures of students.

Public universities, which serve a diverse student body, have a responsibility to create teaching materials that reflect this diversity. To achieve this, they can incorporate local knowledge, adopt problem-based learning, focus on creativity, foster inclusive and develop multicultural teaching materials (Chardnarumarn, Kantathanawat, & Sukkamart, 2023; García-álvarez, Galiz, & Peña, 2023; García-Toledano, Gracia-Zomeño, González-Olivares, & Palomares-Ruiz, 2023; Mukhtarkhanova, Ustelimova, Yessengaliyeva, Iliyassova, & Tanesh 2023; Tweeten & Hung, 2023). In this context, the development of Islamic Religious Education materials that integrate local wisdom offers a strategic approach. However, it is critical that these materials be developed carefully and systematically. A comprehensive validation process is necessary to ensure that the teaching materials align with the curriculum, fulfill the educational objectives of Islamic Religious Education, and honor local cultural values (FitzPatrick, 2019).

A recent study involving lecturers of Islamic Religious Education at several universities revealed that students often lack motivation to learn. Various factors contribute to this, including: (a) the prior study of the subject in schools/madrasas; (b) the course not being a competency requirement, leading students to focus mainly on

passing; (c) a lack of engagement through an active and enjoyable learning environment; and (d) other factors that may reduce interest (Usman, Al-Munawwarah, Bahraeni, Rahman, Munawir, & Nurhilaliyah, 2022). This study hypothesized that the absence of local wisdom in PAI materials may contribute to students' waning interest in the subject. These materials often focus solely on theological and social content, which may not resonate with students' cultural contexts. One of the primary goals of education is to instill cultural values in students, including those at the university level.

This issue has prompted a collaborative effort involving several universities to address three key challenges in Islamic Religious Education at public institutions. These challenges include a lack of student engagement, insufficient integration of local values, and the need for teaching materials that reflect both Islamic principles and local cultural wisdom. A concerted effort has been made to develop innovative solutions that address these concerns, focusing particularly on the need to preserve and transmit local cultural values through education. An intensive study is essential to this effort, and developmental research offers an ideal approach to solving the problem. This study aims to develop teaching materials for Islamic Religious Education that are based on the local wisdom of Sulawesi and Mataram. These materials will be tested in public universities, particularly in Makassar and Mataram.

Previous research has demonstrated that teaching materials based on multiculturalism can effectively enhance students' understanding of tolerance and respect for diversity (Vasquez & Atwood, 2023). Similarly, Mulyati & Usman (2023) found that Islamic Religious Education materials based on local wisdom, such as the "maja labo dahu" concept, help students internalize cultural values such as shame (maja) and fear (dahu) in their behavior. The integration of local languages into teaching materials can further enhance the learning environment (Maphosa & Dube, 2021).

In summary, research on the development and validation of Islamic Religious Education materials based on local wisdom is still limited in public universities. The integration of local wisdom, which is part of the community's cultural heritage, offers a valuable resource for developing teaching materials. In this study, the local wisdom values of South Sulawesi, including *siri'*, *pacce'*, *pemmali*, and *pappaseng* (from the Makassar and Bugis cultures), and the local wisdom values of Mataram, such as *karma*, *sesengak* (honesty and loyalty to promises), *perteke* (purifying religious teachings), and *lelakak* (humanity), will be incorporated into Islamic Religious Education materials. This integration aims to provide students with both theoretical knowledge and an understanding of local cultural values. Thus, this study seeks to explore the extent to which these teaching materials can meet both academic and cultural standards, contributing to a more meaningful and contextually relevant Islamic Religious Education experience for students.

Research Method

This study employed the Research and Development (R&D) method to create educational materials for Islamic Religious Education (PAI) courses that incorporated the

diverse and valuable regional knowledge embedded in the local cultures of South Sulawesi and Mataram. These materials were developed for use in public universities, specifically at Makassar State University and Mataram University. The research utilized the 4-D development model as its framework, a structured approach comprising four stages: Define, Design, Develop, and Disseminate. The first three stages were executed within the scope of this study, while the Disseminate phase was not carried out at this point. It was anticipated that this phase would be continued in subsequent research efforts, potentially involving additional universities and educational institutions in future iterations.

The focus of the study was to integrate the rich and varied local wisdom values from the regions of South Sulawesi and Mataram into the PAI curriculum. The local wisdom values selected for this research included *siri'* and *pacce'* from Makassar culture, and *pemmali* and *pappaseng* from Bugis culture in South Sulawesi. In the Mataram region, the study incorporated values such as *karma* (the concept of moral action) from the Sasak tribe, as well as *sesengak* (honesty and loyalty to keep promises), *perteke* (the purification of religious teachings), and *lelakak* (humanity). These values were deliberately chosen to represent the core principles of local cultures, aiming to provide a meaningful and contextual framework for Islamic Religious Education that aligns with students' daily lives and regional identities.

The decision to focus on these specific local wisdom values from South Sulawesi and Mataram was grounded in the need for a focused research trial that would enable a deeper understanding of how local cultural values can be effectively integrated into educational materials. This geographical selection was made to ensure that the research was both manageable and contextually relevant, providing an in-depth exploration of local cultural traditions that could be integrated into PAI courses at state universities.

Data collection for the study involved the use of several instruments to gather comprehensive information and validate the teaching materials. These instruments included validation sheets, observation sheets, questionnaires, and interview guidelines. The participants were drawn from Makassar State University and Mataram University, specifically targeting educators, experts, and students who engaged with the newly developed materials. Throughout the study, a logical progression was followed, maintaining consistency in the research methodology and ensuring that causal relationships and findings were valid and reliable.

The validation test for the developed teaching materials focused on assessing their reliability and accuracy. The reliability was evaluated using two key methods: the percentage of agreement between evaluators and Cronbach's Alpha coefficients, both of which served to determine the internal consistency of the instruments. Experts and practitioners from both universities conducted the validation tests. These evaluations were carried out using SPSS 20.0 for Windows software to ensure statistical accuracy and reliability. The results of these tests confirmed that the developed materials met the required standards and were deemed both valid and reliable for use in the educational setting.

In addition to the validation phase, the effectiveness of the teaching materials was assessed through direct observation of student activities. The researchers used a field notes instrument to record observations during the trials at the two universities. These notes captured key insights into student engagement, participation, and the overall impact of the materials on students' understanding of Islamic Religious Education. The findings from these observations were analyzed to determine how well the materials supported student learning, particularly in terms of integrating local wisdom into the curriculum and enhancing the students' connection to their regional cultures.

Through these combined methods of validation and effectiveness assessment, the research provided a comprehensive evaluation of the developed educational materials. The results of this study showed that the integration of local wisdom into Islamic Religious Education was not only possible but also highly effective in making the content more relevant and meaningful to students. The study highlighted the importance of culturally contextualized teaching materials in public universities and demonstrated how such an approach could bridge the gap between traditional religious education and the practical, everyday realities of students' lives. These findings opened the door for further research and development of educational materials that blend academic rigor with cultural relevance, ensuring that future generations of students are not only educated in Islamic principles but also connected to the values of their own communities.

Results and Discussion

Results

The Development Process of Teaching Materials for Islamic Education Courses Based on Multi-Local Wisdom

This study utilized the theoretical framework developed by Sivasailam Thiagarajan, Dorothy S. Semmel, and Melvyn I. (1975), which outlines a four-stage process for developing teaching materials: (1) Define, (2) Design, (3) Develop, and (4) Disseminate. Due to time constraints, the dissemination stage was not carried out in this research, though it is anticipated to be included in future studies. Below is an explanation of the four stages of the development process:

Define Stage

In the define stage, the researchers conducted interviews with lecturers teaching Islamic Religious Education (PAI) courses, analyzed the PAI course syllabi, and reviewed the textbooks used in these courses. The analysis of the syllabi revealed that the courses covered a broad range of topics, such as the concept of divinity, human nature, law and human rights, ethics, science and technology, art, interfaith harmony, societal welfare, culture, and the political democratic system in Islam. These topics formed the foundation for developing instructional materials that incorporated local wisdom values from the Makassar, Bugis, and Mataram regions.

Additionally, the syllabi of PAI courses at the observed institutions showed significant similarities. This uniformity was largely due to the active participation of PAI

lecturers in national course consortia and the Indonesian Association of PAI Lecturers in the public higher education sector. Interviews with lecturers from other institutions confirmed that the syllabi were largely consistent across different universities. Although lecturers utilized different textbooks, these materials were carefully analyzed to ensure content alignment. Based on this analysis, the researchers selected specific subject areas from the textbooks to inform the development of multi-local wisdom-based PAI course materials for the design stage.

Design Stage

This stage involves the preparation of teaching materials for Islamic Religious Education (PAI) courses, grounded in multi-local wisdom. The development process focused on four primary subjects: (1) the concept of God in Islam, (2) the concept of man in Islam, (3) morals, ethics, and values, and (4) Islamic culture. Through an in-depth exploration of these topics, the researchers were able to design teaching materials that integrate both Islamic principles and local wisdom, creating a culturally relevant curriculum.

Once the materials were developed, they were reviewed by a Validator Team, consisting of subject matter experts and practitioners. The team provided feedback, offering suggestions and assessments aimed at addressing any shortcomings or limitations in the content. This process, known as revision, was a key component in refining the teaching materials. The validation carried out by the team was critical in ensuring the alignment of the materials with the objectives of Islamic Religious Education and their appropriateness for local contexts.

If the Validator Team deemed the teaching materials valid, they would be approved for use in PAI courses. However, if the materials were found to be inadequate, further revisions would be made until they met the required standards for academic and cultural relevance. This iterative process ensured that the final materials were not only academically sound but also culturally sensitive and aligned with the values of the local communities.

Develop Stage

During the development stage, the researchers engaged with a team of expert validators, consisting of six individuals, four of whom were lecturers specializing in Islamic Religious Education (PAI) from both public and private higher education institutions, and two were practitioners with relevant experience in the field. The researchers conducted five consultations through focus group discussions, during which they received detailed revision notes from the validators.

The first set of revisions focused on the design format of the teaching materials, ensuring they adhered to academic and aesthetic standards. The second revision addressed the integration of local wisdom values into the content of the PAI materials, ensuring that these values were appropriately reflected in the curriculum. The third revision concerned the legibility of the teaching materials, specifically the font, typeface, and cover design, to enhance their accessibility and readability. The fourth revision aimed to improve the overall appeal of the materials, considering factors such as visual

design and user engagement. Finally, the fifth revision involved the addition of supplemental content, including a bibliography that referenced scholarly sources published within the last 5 to 10 years, and emphasized the incorporation of effective argumentation techniques to strengthen the academic rigor of the materials.

Following these five rounds of revisions, the teaching materials were deemed suitable for use in PAI courses at public universities. Additionally, the materials were tested in eight classroom sessions at one university and in four classroom sessions at another, providing further insights into their effectiveness and reception by students. However, the fourth stage of Thiagarajan's development model, which involves disseminating the materials to other universities, was not conducted during this phase due to time constraints, limiting the scope of the research. Despite this, the results from this stage lay the groundwork for the future implementation of these materials in additional public universities.

The developed teaching materials were characterized by their objective approach, employing clear and concise language, with a logical flow of information that adhered to conventional academic structures and formal registers. The materials included topics such as "Basic Concepts of Godhead in Islam," "Humans According to Islamic Perspectives," and "Morals, Ethics, Science, Technology, and Art in Islam." Furthermore, the materials addressed the theme of "Harmony Between Religious Communities," which encompassed key components such as fundamental competencies, success measures, learning targets, concept maps, and resources that incorporated region-specific wisdom principles for each subject area. The materials also included a developmental evaluation section and relevant academic sources, ensuring their academic rigor and contextual relevance.

The Level of Validity of the Development of Teaching Materials for Islamic Religious Education Courses Based on Local Wisdom

The validity of the developed teaching materials for Islamic Religious Education (PAI) courses, based on multi-local wisdom, was assessed using the framework proposed by Hobri. According to this framework, the validity of teaching materials and their associated devices is determined by the average score of the indicators provided by each validator. These scores are calculated by averaging the values for each individual aspect, and then determining the total average score based on the evaluation of all aspects.

The validity of the educational materials, particularly in the form of textbooks, was assessed across four key dimensions: (a) instructional aspects, (b) content feasibility, (c) presentation feasibility, and (d) language feasibility. These dimensions serve as the core criteria for evaluating the overall quality and suitability of the materials for PAI courses. Then, the team of validators, comprising experts and practitioners, conducted a thorough evaluation based on these aspects, resulting in a comprehensive assessment of the materials' effectiveness. The findings of the assessment were subsequently used to refine the materials further, ensuring that they meet the required academic standards and are contextually relevant to the target learners. The results of the validity assessment, including the average scores for each of the evaluated aspects, are summarized in Figure 1. This visual representation provides a clear overview of the validation process, highlighting the areas of strength and potential areas for further improvement.

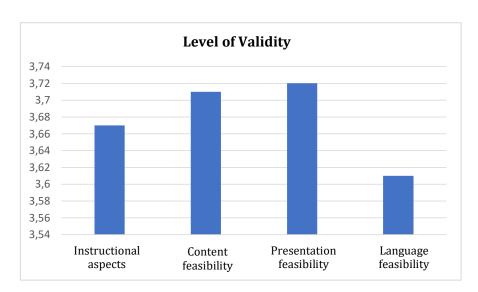


Figure 1. Level of Validity of the Development of Teaching Materials for Islamic Education Based on Multi-Local Wisdom

The results of the research on the development of Islamic education materials based on multi-local wisdom demonstrated a high level of validity. The overall validity of the teaching materials received an average score of 3.68, categorizing it as "very valid." Additionally, the learning outcomes test instrument, which assessed the effectiveness of the developed materials in achieving educational goals, yielded an average score of 3.70, also falling within the "very valid" category.

Discussion

The findings of this study underscore the importance of developing teaching materials for Islamic Religious Education (PAI) that incorporate local wisdom, particularly within public universities. By integrating regional values such as *Siri, Pacce* (in Makassar studies), *Pemmali, Pappaseng* (in Bugis studies), *Sesengak* (honesty and loyalty to promises), *Perteke* (purifying religious teachings), and *Lelakak* (humanity), these materials help bridge the gap between religious education and the local customs and culture of students. This approach proves to be highly effective in enhancing students' understanding of Islam, while also reinforcing their connection to the cultural heritage of their communities.

The validity of the teaching materials developed in this study was evaluated through a comprehensive analysis, and the results indicate that these materials meet the criteria for validity, including accuracy, relevance to learning objectives, and their potential to effectively support the learning process. Specifically, the local wisdom-based PAI teaching materials received high validity ratings, indicating their suitability as effective educational tools. This outcome aligns with previous research, which highlights the efficacy of integrating local knowledge into teaching materials across various disciplines, biology (Leksono, Kurniasih, Marianingsih, Nuryana, Camara, Islami, & Cahya, 2023), mathematics (Nuryadi, Fitiradhy, Marhaeni, Purwoko, & Rumasoreng, 2023), and science (Hariyono, Rizki, Lestari, Citra, Islamiyah, & Agusty, 2023).

Local wisdom is often recognized as an essential component in fostering students' personal development and improving learning outcomes (Wahyudi, Verawati, Islahudin, & Agustina, 2023). By incorporating regional knowledge into PAI teaching materials, the study demonstrated how such an approach positively influences students' understanding of Islam within the context of their local cultures and traditions. This integration allows students to see Islam not as an abstract, universal concept, but as a faith that is deeply intertwined with their cultural identity. The study highlights the role of indigenous values such as honesty, loyalty, religious purity, and humanity in shaping students' moral and ethical character. As Tiyasmala, Andayani, & Anindyarini (2023) suggest, local wisdom offers an effective strategy for addressing global challenges, including the crisis in student character development. The deteriorating standards of student personality, which has become a widespread concern, can be mitigated through community-centric intellectual learning that emphasizes responsibility and cultural preservation (Afolabi, 2023; Hassan, 2023).

Moreover, the development of PAI instructional materials rooted in native knowledge significantly enriches students' learning experiences. It provides them with content that is not only relevant to their academic goals but also meaningful in their daily lives. This context-specific approach to education fosters deeper engagement and ensures that students are learning material that is applicable to their cultural and social environments. Despite the individual differences among students, the teaching resources were tailored to align with the specific traits of the study's participants. Teachers must take into account students' unique characteristics to overcome potential learning barriers. This includes adapting lesson structures, instructional techniques, and classroom management strategies to better meet students' needs, as highlighted by Elhadary and Elhaty (2023), König, Glutsch, Weyers, Casale, Hanke, Knips, Pohl, Waschewski, Becker-Mrotzek, Schabmann, and Träuble (2023) and Raković, Uzir, Matcha, Eagan, Jovanović, Shaffer, Pardo, and Gašević (2023). Adjusting these elements in accordance with students' attributes has been shown to significantly improve the learning process. Furthermore, by presenting Islam as a life guide integrated with local values, such as Siri, Pacce, Pemmali, Pappaseng, Sesengak, Perteke, and Lelakak, this approach motivates students to view their faith as a part of their identity and daily practice.

In alignment with these findings, Malla, Misnah, & Markarma (2021) also acknowledge the value of developing PAI teaching resources based on local wisdom. This approach not only enriches students' knowledge by connecting the content with their cultural surroundings but also preserves and promotes the significance of regional knowledge. By doing so, teachers are better equipped to engage students with the subject matter in a manner that is both culturally relevant and pedagogically sound. The integration of local wisdom into PAI teaching materials, therefore, provides a dual benefit: it strengthens the connection between students and their cultural heritage, while also enhancing their understanding of Islamic teachings in a contextualized and meaningful way.

Conclusion

The creation of Islamic Religious Education (PAI) learning resources based on local knowledge represents a relevant and beneficial initiative within higher education. The validation scores obtained from the expert reviewers indicate that the developed teaching materials align with the curriculum requirements, particularly in terms of instructional methods, content relevance, presentation appropriateness, and language proficiency. The findings from this study suggest that integrating local cultural values with Islamic teachings results in a more contextualized and meaningful learning experience for students. By incorporating indigenous wisdom into PAI materials, students are better able to connect Islamic principles with their cultural identity and lived experiences, thereby fostering a deeper understanding of both their faith and heritage.

In light of these results, this research provides valuable insights for other universities looking to develop PAI teaching materials that harmonize Islamic teachings with local cultural values. It offers a framework for creating educational resources that are not only academically rigorous but also culturally resonant, thereby enhancing students' engagement and learning outcomes. This approach holds the potential to enrich the educational landscape by promoting the integration of regional knowledge with religious education, ultimately contributing to a more holistic and inclusive academic environment.

Acknowledgments

The researchers would like to express my sincere gratitude to the faculty, staff, and students involved in this study for their valuable collaboration and support. Special thanks to the educators, experts, and participants who provided insightful feedback during the development and validation of the educational materials. Additionally, they are deeply appreciative of the communities of South Sulawesi and West Nusa Tenggara for sharing their rich cultural wisdom, which formed the foundation of this research. The local values from these regions were crucial to the study's success. Finally, the researchers would like to thank my family for their unwavering support and encouragement throughout this research journey. Their belief in this work has been a constant source of strength.

Ethical Statement

This study adhered to ethical guidelines, ensuring participants' rights and confidentiality. Informed consent was obtained from all participants, including the faculty, staff, and students of the observed universities, who were assured of voluntary participation and the right to withdraw at any time. To protect privacy, pseudonyms were used, and all data were securely stored. The study was approved by an institutional ethics committee and conducted with cultural sensitivity. Data collection involved observation, semi-structured interviews, and document analysis, and participants were informed that the findings would be used for academic purposes only.

CRediT Authorship Contribution Statement

- **Author 1:** Led the overall design and direction of the research, conceptualized the study, and supervised the development of the teaching materials. Responsible for the literature review, research methodology, and data analysis. Coordinated the validation process and wrote the majority of the manuscript.
- **Author 2:** Contributed to the conceptualization of the research framework, particularly in integrating local wisdom values into the Islamic Religious Education curriculum. Led the design and development of teaching materials, including identifying key regional values. Assisted in the data analysis and drafting sections of the manuscript related to curriculum development and educational integration.
- **Author 3:** Responsible for the data collection process, including designing the validation tools (questionnaires, observation sheets, and interview guidelines). Conducted statistical analysis (e.g., reliability testing using SPSS) and interpreted the findings. Assisted in refining the teaching materials based on data validation outcomes. Contributed to the data presentation and analysis sections of the manuscript.
- Author 4: Conducted field observations and interviews in South Sulawesi and Mataram. Provided expertise on local wisdom and cultural practices relevant to Islamic Religious Education. Contributed to the development and contextualization of teaching materials based on regional knowledge. Assisted in the final manuscript review and contributed to the cultural interpretation of findings.

Conflict of Interest

The authors declared no conflict of interest.

Data Availability

The data are available upon request.

References

- Afolabi, A. P. (2023). a social constructivist understanding of culture for environmental justice and policy. *Acta Academica*, *55*(2), 201–220. https://doi.org/10.38140/aa.v55i2.7722.
- Aricindy, A., Wasino, & Wijaya, A. (2023). Local wisdom for mutual cooperation in indonesia: an etnographic investigation on value of marsiadapari tradition, sianjur mula-mula sub-district, samosir regency, North Sumatera Province. *Kasetsart Journal of Social Sciences*, 44(2), 555–564. https://doi.org/10.34044/j.kjss.2023.44.2.26.
- Chardnarumarn, J., Kantathanawat, T., & Sukkamart, A. (2023). Enhancing information communication technology competency in that university student computer education courses. *Journal of Higher Education Theory and Practice*, *23*(18), 17–34. https://doi.org/10.33423/jhetp.v23i18.6619.
- Elhadary, T., & Elhaty, I. A. (2023). Teaching chemistry in english in turkish universities: challenges and obstacles. *Advanced Education*, 2023(23), 131–143. https://doi.org/10.20535/2410-8286.288479.

- FitzPatrick, B. (2019). Validity in qualitative health education research. *Currents in Pharmacy Teaching and Learning*, 11(2), 211–217. https://doi.org/10.1016/j.cptl.2018.11.014.
- García-álvarez, D., Galiz, D., & Peña, H. (2023). Character strengths, emotional distress, and academic procrastination in psychology students. *Revista de Estudios e Investigacion En Psicologia y Educacion*, 10(2), 262–281. https://doi.org/10.17979/reipe.2023.10.2.9847.
- García-Toledano, E., Gracia-Zomeño, A., González-Olivares, Á. L., & Palomares-Ruiz, A. (2023). Development of essential competences for the success of inclusive quality teaching–learning processes in higher education. *Education Sciences*, *13*(12). https://doi.org/10.3390/educsci13121243.
- Hakim, A., Efwinda, S., Damayanti, P., Syam, M., Mutmainah, O., & Norsaputra, A. (2023). Improving climate literacy of high school students through physics teaching materials based on STEM. *Jurnal Pendidikan IPA Indonesia*, *12*(4), 526–537. https://doi.org/10.15294/jpii.v12i4.43188.
- Hariyono, E., Rizki, I. A., Lestari, D. A., Citra, N. F., Islamiyah, A. N., & Agusty, A. I. (2023). Engklek game ethnoscience-based learning material (egeblm) to improve students' conceptual understanding and learning motivation. *Jurnal Pendidikan IPA Indonesia*, 12(4), 635–647. https://doi.org/10.15294/jpii.v12i4.43941.
- Hassan, S. (2023). Culture and author's personality in the literary text: a rereading of Abubakar Imam's Magana Jari Ce. *Studies in African Languages and Cultures*, 2023(57), 77–100. https://doi.org/10.32690/SALC57.4.
- König, J., Glutsch, N., Weyers, J., Casale, G., Hanke, P., Knips, C., Pohl, T., Waschewski, T., Becker-Mrotzek, M., Schabmann, A., & Träuble, B. (2023). Observing effective classroom management in early instruction in primary school: rating instrument construction and its link to teacher knowledge. *Discover Education*, *2*(1). https://doi.org/10.1007/s44217-023-00058-7.
- Leksono, S. M., Kurniasih, S., Marianingsih, P., Nuryana, S., Camara, J. S., Islami, R. A. Z. El, & Cahya, N. (2023). From Farm to classroom: tubers as key resources in developing biology learning media rooted in banten's local culture. *Jurnal Pendidikan IPA Indonesia*, 12(4), 575–589. https://doi.org/10.15294/jpii.v12i4.48278.
- Malla, H. A. B., Misnah, & Markarma, A. (2021). Implementation of multicultural values in islamic religious education based media animation pictures as prevention of religious radicalism in Poso, Central Sulawesi, Indonesia. *International Journal of Criminology and Sociology*, 10, 51–57. https://doi.org/10.6000/1929-4409.2021.10.08.
- Maphosa, V., & Dube, B. (2021). Local language numeracy kindergarten prototype design to support home-based learning during and post covid-19 pandemic. *Contemporary Educational Technology*, 13(3). https://doi.org/10.30935/cedtech/10846.
- Mukhtarkhanova, A., Ustelimova, N., Yessengaliyeva, A., Iliyassova, A., & Tanesh, B. (2023). The use of multimedia in english classes as a means of increasing student motivation. *World Journal of English Language*, 13(9), 10–17. https://doi.org/10.5430/wjel.v13n9p10.
- Mulyati, & Usman. (2023). Pengembangan bahan ajar pendidikan agama Islam dan budi pekerti berbasis kearifan lokal Maja Labo Dahu di SDN No.2 Sumi Kabupaten Bima. *Gurutta*, *3*(1), 22–28. https://journal.uin-alauddin.ac.id/index.php/gurutta/article/view/35784.

- Negoro, R. A., Rusilowati, A., & Aji, M. P. (2023). Scratch-assisted waves teaching materials: ICT literacy and students' critical thinking skills. *Journal of Turkish Science Education*, 20(1), 189–210. https://doi.org/10.36681/tused.2023.011.
- Nuryadi, Fitiradhy, A., Marhaeni, N. H., Purwoko, R. Y., & Rumasoreng, M. I. (2023). The Effects of puppet ethnomathematics applications as mathematics teaching materials for character education-based. *Pegem Egitim ve Ogretim Dergisi*, *13*(2), 153–160. https://doi.org/10.47750/pegegog.13.02.19.
- Raković, M., Uzir, N. A., Matcha, W., Eagan, B., Jovanović, J., Shaffer, D. W., Pardo, A., & Gašević, D. (2023). Network analytics to unveil links of learning strategies, time management, and academic performance in a flipped classroom. *Journal of Learning Analytics*, 10(3), 64–86. https://doi.org/10.18608/jla.2023.7843.
- Saada, N. (2023). Educating for global citizenship in religious education: islamic perspective. *International Journal of Educational Development*, 103. https://doi.org/10.1016/j.ijedudev.2023.102894.
- Samad, S. A. A., Gade, S., Basri, H., Silahuddin, & Ariani, S. (2023). Teacher's spiritual competence and its implication in islamic religious education learning in Pidie, Aceh. *Ulumuna: Journal of Islamic Studies*, *27*(2), 624–648. https://doi.org/10.20414/ujis.v27i2.710.
- Sari, D. E., Sumiyadi, Sunendar, D., & Mulyati, Y. (2023). Indigenous values of short stories in indonesian fictional prose in higher education: implication on language education. *International Journal of Language Education*, 7(4), 763–774. https://doi.org/10.26858/ijole.v7i4.59492.
- Sinaga, M. S., Situmorang, M., & Hutabarat, W. H. (2019). Implementation of innovative learning material to improve students competence on chemistry. *Indian Journal of Pharmaceutical Education and Research*, 53(1), 28–41. https://doi.org/10.5530/ijper.53.1.5.
- Sookkaew, J., Chaikaew, N., & Saephoo, P. (2023). Phuket mascot design from based on cultural value. *Indonesian Journal of Electrical Engineering and Computer Science*, 29(2), 788–796. https://doi.org/10.11591/ijeecs.v29.i2.pp788-796.
- Tiyasmala, M., Andayani, & Anindyarini, A. (2023). Representation of local wisdom in the ancient indonesian manuscript as literature learning materials in school. *Theory and Practice in Language Studies*, 13(12), 3217–3223. https://doi.org/10.17507/tpls.1312.19.
- Tweeten, J., & Hung, W. (2023). Design-based research method in pbl/pjbl: a case in nursing education. *Interdisciplinary Journal of Problem-Based Learning*, 17(2). https://doi.org/10.14434/ijpbl.v17i2.37740.
- Usman, Al-Munawwarah, R., Bahraeni, Rahman, A. F., Munawir, Nurhilaliyah. (2022). *Uji Keefektifan dan kepraktisan pengembangan model pembelajaran koperatif berorientasi islami melalui mata kuliah ilmu pendidikan Islam pada PTKIN dan PTKIS Wilayah Sulawesi Selatan dan Barat.* 000375311.
- Vasquez, S., & Atwood, E. D. (2023). Science for some: examining representations of relevancy and multiculturalism in texas biology standards and textbooks. *Frontiers in Education*, 8. https://doi.org/10.3389/feduc.2023.1076751.
- Wahyudi, Verawati, N. N. S. P., Islahudin, & Agustina, S. (2023). Hybrid ethno-project based learning integrated with virtual assistive technology to enhance students' critical thinking in fundamental physics course. *TEM Journal*, 12(4), 2006–2012. https://doi.org/10.18421/TEM124-11.