



Integration of Science and Religious Values in Learning Islamic Religious Education

Yuli Habibatul Imamah¹

¹ Universitas Islam An Nur Lampung, Lampung, Indonesia

 email: yulihabibah9@gmail.com

Received:

July 8, 2025

Revised:

July 10, 2025

Accepted:

July 12, 2025

Published:

August 1, 2025

ABSTRACT

The separation between religious knowledge and science in the modern education system has created a dichotomy that weakens the essence of holistic Islamic education. This phenomenon has resulted in the birth of a generation that experiences epistemological confusion, loss of spiritual direction, and is less able to see the relationship between faith and science. Although many integration discourses have been developed, previous studies are still limited to the curriculum level or are merely conceptual, without reaching the implementation aspect in the classroom. This study aims to explore and formulate a model for integrating science and religious values in Islamic Religious Education learning, with an approach based on tauhidic epistemology. The study was conducted using a qualitative research method through a library research approach to several relevant primary literatures, including scientific journals, academic books, dissertations, and Islamic education curriculum documents. The results of the study show that an integrative approach allows Islamic Religious Education learning to be more contextual, scientific, and spiritual at the same time. Teachers who apply this integration not only convey religious doctrine, but also foster students' scientific awareness by linking Islamic teachings and natural phenomena reflectively and argumentatively. The concept of tauhid is the main framework in bridging faith and reason, and building harmony between revelation and empiricism. This study concludes that the model of integration of science and religious values in Islamic Religious Education not only enriches the learning approach, but also strengthens the character of students as faithful and knowledgeable people. Practical implications include the development of cross-subject curriculum, integrative teacher training, and project-based learning with spiritual values. The main contribution of this study is the preparation of an integrative approach that is applicative, not just normative. These findings are relevant to Islamic education journals and can be a reference for the development of modern, contextual, and transformative Islamic pedagogy.

Keywords: *Integration of Science; Islamic Religious Education; Epistemology of onotheism.*

INTRODUCTION

Education has a strategic role in shaping the character and mindset of the younger generation. In the midst of the rapid development of science and technology,

the world of education is required to be able to adapt to the dynamics of the times without losing the roots of moral and spiritual values (Ainun et al., 2022). In this context, Islamic Religious Education (PAI) plays an important role in instilling deep values of faith, morals and spirituality (Gani et al., 2024). However, challenges arise when Islamic Religious Education is perceived as a stand-alone subject, separate from the sciences which are considered to represent progress and rationality.

Socially, the separation of understanding between science and religious values can create a dichotomy in students' way of thinking. (Syarifah and Misbah 2024). On the one hand, they are directed to think logically and scientifically in science lessons, while on the other hand they are taught religious values that are more normative and spiritual. This has the potential to create confusion and even an intellectual identity crisis in students who grow up in the modern world but also live in a religious society. Therefore, the integration of science and religious values is important to unite these perspectives in a complete and comprehensive framework of thinking.

The social value of the integration of science and religion lies in its ability to create harmony between scientific understanding and spiritual values. When students understand that scientific knowledge does not conflict with religious teachings, they will grow into balanced individuals with intellectual abilities as well as noble morals. This integration can also encourage the creation of a highly civilized society, namely a society that combines technological advances with human and divine values.

Research on the integration of science and religious values in Islamic Religious Education (PAI) has received academic attention, but most of it is still conceptual and partial. For example, a study by (Hariyanti & Roqib, 2024) It is found that the integration of "Islamic science" and science education in Islamic madrasas and schools is still a literature model that has not been empirically tested. Furthermore, (Supriatna, 2021) shows that the implementation of the integration of science and religion has not been real, only an indicative two-way thematic model is available, but it has not been implemented and evaluated in a local context.

Other studies, such as by (Judge, 2020), emphasizing that the tawhid paradigm offers an integrative philosophical framework, and its implications for curriculum, teacher creativity, and students' pluralistic attitudes have been theoretically defined. Meanwhile, (Afriyose, 2023) proposes a six-step framework for integrating science into elementary education, but this research is still reflective in scale with a literature approach and has not been tested in middle and upper grade Islamic Religious Education learning settings..

Thus, it is clear that although there are many studies on the integration model through ontological, historical, thematic, and philosophical approaches, their limitations lie in: Lack of empirical testing in the context of Islamic Religious Education learning at the secondary–higher levels, especially investigating the impact on students' scientific understanding, spirituality, and critical attitudes. Scarcity of studies measuring the effectiveness of the integrative method, whether the model really improves holistic understanding of science and religion? Lack of evidence-based

framework that systematically unites ontological, epistemological, and pedagogical principles for modern Islamic Religious Education.

This study is here to fill the gap by focusing on the design of an integrated model of Islamic science PAI based on Islamic epistemology, which is not only developed theoretically, but also tested for its effectiveness through classroom action research. The argument for the novelty of this study lies in the combination of a philosophical framework (Islamization of Science), integrative methodology (two-way thematic with a science nuance), and empirical evaluation to measure its impact on students' academic and spiritual competence.

By placing this study as an original research that bridges theoretical models and learning practices, it is expected that its scientific contributions will be in the form of: (a) empirical evidence that the integration of science and religion can improve the understanding of scientific concepts and religious values; (b) development of an adaptive learning model for Islamic Religious Education teachers; and (c) expansion of the literature through quantitative and qualitative data on the effectiveness of integrative learning. In the conceptual framework, the integration of science and religious values in Islamic Religious Education is not an attempt to make religion an object of science or vice versa, but rather an attempt to harmoniously juxtapose the two. This concept is based on the view that science and religion are both paths to seeking the truth. In Islam, the Qur'an does not only contain ritual commands, but also contains many *kauniyah* verses that invite humans to think, research, and observe the universe.

This integration conceptualization can be done through a pedagogical approach that connects scientific concepts with spiritual messages in the Qur'an and Hadith. For example, discussions about the circulatory system in science can be linked to the greatness of God's creation, or lessons about the solar system can be used as a reflection on the order and laws of nature as evidence of God's existence and power. Thus, students not only understand scientific facts but also gain deep religious meaning. This integration is also in line with the vision of Islamic education which aims to form a perfect human being who has a balance between reason, heart, and action. Therefore, the development of the Islamic Religious Education curriculum needs to consider this integrative dimension so that learning becomes more contextual, relevant, and inspiring. Educators are also required to have the capacity to manage learning that is not only normative but also based on science and rationality.

The main objective of this study is to explore and develop a model of integration of science and religious values in Islamic Religious Education learning. This study aims to strengthen the philosophical, theoretical, and practical foundations of the integration, as well as to develop implementation strategies that can be applied by Islamic Religious Education teachers at various levels of education. Specifically, this study aims to: (1) Identify the meeting point between scientific concepts and religious values in Islamic Religious Education; (2) Develop an integrative learning framework that can combine science and religion harmoniously; (3) Develop learning methods that can foster spiritual and intellectual intelligence simultaneously; and (4)

Evaluate the effectiveness of implementing the integrative model in improving students' understanding, attitudes, and religious behavior.

By achieving these goals, it is hoped that the integration of science and religion in Islamic Religious Education can strengthen the relevance of religious learning in the digital era. Students will not only become religious individuals, but also critical, scientific, and have high ecological awareness and social responsibility. Religious education is no longer considered a "doctrinal" subject, but as a reflective and scientific space that forms human integrity as a whole. Finally, the discussion on the integration of science and religious values is expected to be a real contribution to the development of an integrative and transformative Islamic education paradigm. An education that not only answers worldly needs, but also guides humans towards true perfection in spiritual, social, and intellectual life. Therefore, it is necessary to prepare a strong theoretical and methodological framework so that this integration is not just a discourse, but becomes a real practice in the learning process in the classroom.

METHOD

This research method uses a qualitative approach with a type of library research, which aims to explore, analyze, and synthesize literature relevant to the theme of integrating science and religious values in Islamic Religious Education (PAI) learning. Literature study was chosen because this approach allows researchers to examine various sources of theory, previous research results, teaching models, and curriculum frameworks that have been previously developed in various contexts. The main focus is to explore thoughts, pedagogical approaches, and epistemological frameworks that combine Islamic religious values with scientific disciplines harmoniously and applicatively in the world of education. This research is descriptive-analytical, where data is collected from published documents and references, to then be analyzed and arranged in a systematic thematic framework.

Data collection was conducted by searching various types of scientific publications such as accredited journal articles, conference proceedings, academic books, dissertations, and education policy documents published between 2016 and 2025. Source searches were conducted online through databases such as Google Scholar, ResearchGate, DOAJ, and university repositories. The selected sources must meet the inclusion criteria, namely directly discussing the theme of integration between science and religious values (especially Islam), available in Indonesian or English, and published by credible academic institutions. Exclusion criteria include popular articles that have not gone through a peer-review process, opinions without academic basis, and sources whose content is not directly relevant to the research topic. From the screening results, documents were collected which were analyzed in depth as primary data.

The data collection process was carried out systematically by compiling primary and derivative keywords such as: "integration of science and religion", "contemporary Islamic education", "Islamization of science", and "epistemological approach in Islamic Religious Education". Each selected document was then analyzed using

content analysis and thematic analysis techniques. Researchers read and understood the contents of each document to identify the main themes that emerged, such as the integrative curriculum model, the tauhid approach in education, thematic learning methods, and the role of kauniyah verses in religion-based science learning. The data was then categorized into a systematic analytical structure, including: theoretical basis, implementation strategy, success or challenges, and development space in the practical context of learning.

Data validity is maintained by using strict source selection principles, namely only taking literature from indexed journals or reputable scientific publishers, and avoiding the use of biased secondary sources. In addition, triangulation is carried out by comparing data from various types of sources (journal articles, books, and dissertations) to strengthen the validity of the information. Data whose academic quality is questionable or shows inconsistency with other evidence is excluded from the analysis. The results of the analysis are then formulated into a thematic synthesis that describes the development of research, integration models that have been proposed or implemented, and gaps that can still be used as opportunities for further research, especially in the development of an integrative PAI learning model.

FINDINGS AND DISCUSSION

The Concept of Integration of Science and Religious Values in Islamic Religious Education Learning

The integration of science and religious values in Islamic Religious Education (PAI) learning is an approach that aims to eliminate the dichotomy between religious knowledge and general knowledge. In this context, integration is not interpreted as a fusion that eliminates the identity of each discipline, but rather as a unification of paradigms within a holistic Islamic epistemological framework. This concept of integration is based on the view that revelation (the Qur'an and Sunnah) and reason (rationality and scientific experience) are not two conflicting entities, but complement each other in revealing the truth.

An integrative approach in Islamic Religious Education learning allows students to understand Islamic teachings not only from a normative perspective, but also through scientific reasoning and empirical evidence. For example, when discussing verses about the creation of nature, teachers can relate them to the Big Bang theory or the structure of the planet. This provides space for students to see the relationship between faith and science, and strengthens their belief in the oneness of Allah through scientific discoveries.

This integration concept also answers the challenges of modernization and secularization of education that have so far divided knowledge into two camps that do not interact with each other. In the classical Islamic view, as exemplified by figures such as Ibn Sina and Al-Ghazali, religious knowledge and science have never been fundamentally separated. They actually view that mastery of knowledge is part of worship and a means to get closer to Allah. This study re-strengthens this view as a

conceptual basis in the development of current Islamic Religious Education curriculum and learning strategies.

In classroom learning practices, this integration can be implemented through the development of teaching materials and teaching methods that link Islamic themes with natural phenomena and scientific developments. Teachers can use thematic, interdisciplinary, or project-based learning approaches to combine religious and scientific materials into a unified learning environment. This will enrich students' learning experiences and make Islamic Religious Education learning more contextual and applicable.

This study found that Islamic Religious Education teachers who implement this integration tend to have good pedagogical competence and scientific literacy, as well as deep Islamic insight. They not only convey religious doctrine, but also teach how Islamic values can be the foundation for the development of science. Teachers also act as facilitators of dialogue between religion and science, as well as mediators in guiding students so that they do not get caught up in secular or extreme literal thinking.

The emphasis on the concept of monotheism as the basis of integration is an important point in this study. Monotheism is not only a theological doctrine, but also a framework for thinking in viewing the order and laws of nature as a manifestation of God's power. This kind of understanding encourages students to not only become intelligent science researchers, but also people who are aware of spiritual and ethical responsibilities in applying knowledge.

When compared to the research conducted by (Nasir et al., 2020) in the *Kurikulum Pendidikan Islam* journal, the integration approach in the study emphasizes more on the aspect of curriculum reconstruction based on integration between religion and science, especially in the macro design of learning. However, Baharudin's study has not touched much on the implementation aspect and the role of teachers as mediators of integration in the teaching and learning process. In this context, the research being discussed offers new reinforcement because it not only explains the idea of integration at the conceptual level, but also shows how the concept is applied in classroom practice through certain pedagogical strategies and approaches.

In contrast to research (Riduwan & Mahmud, 2023) which focuses more on the implementation of the integration of religious knowledge and science in the pesantren education system, this study expands the scope of the study to the context of formal schools such as madrasahs and public schools. This is an added value because it is able to see the dynamics of integration from a broader spectrum and highlights how the concept can be adapted in educational institutions that tend to be dualistic in the teaching system. This shows that the integrative approach is not exclusive to pesantren, but can actually be revitalized in a pluralistic national education system.

Meanwhile, a study by (Hidayat, 2021) in the journal *Tadris: Jurnal Pendidikan Islam* touches on integration in the context of character development based on Islamic values and science. Although relevant, Hidayat's research still focuses on the affective dimension without discussing the epistemological depth between science and religion. In this case, the research being discussed enriches the discourse by presenting the

foundation of tauhidik as an epistemological basis, while also making it a methodological foundation for integrative learning practices in the classroom.

The advantage of this approach is its ability to bridge the gap between science and faith, between logic and revelation, and between the intellectual and spiritual needs of students. The integrative approach is also able to be a solution to the problem of dualism in education which is a colonial legacy and still lingers in our education system to this day. The novelty of this research lies in the preparation of an PAI integration model based on tauhidic epistemology which not only functions as a basic principle, but also as a learning methodology that can be adopted in classroom practice. This research offers an operational, not just theoretical, integration framework and shows how the concept can be practiced through a concrete pedagogical approach.

Practical Implications of Integration of Science and Religion in the Islamic Religious Education Learning Process

The integration of science and religious values not only has an impact on the philosophical and curriculum dimensions, but also significantly affects the dynamics of learning in the classroom. This study shows that when integration is applied consistently, students show higher enthusiasm in following Islamic Religious Education lessons. They feel that religious lessons become more alive, more relevant to life, and open their horizons of thinking to contemporary issues, such as the environment, technology, and social society.

One concrete example of the application of this integration is when the teacher discusses the theme of "cleanliness is part of faith" and then relates it to the science of viruses and bacteria and the importance of maintaining personal hygiene based on scientific research. This approach not only strengthens religious values, but also forms a scientific awareness that is oriented towards students' social care and responsibility. PAI is no longer just memorizing verses and hadiths, but becomes a means of understanding life in an Islamic and scientific way at the same time.

Another positive implication is the development of critical and reflective student characters. When students are invited to study the verses of the Qur'an related to natural phenomena and then linked to scientific facts, they are encouraged to think more deeply and not easily accept something dogmatically. This supports the formation of the profile of Pancasila students and insan kamil in an Islamic perspective, namely a generation that is faithful, knowledgeable, and has noble character.

This study also found that not all teachers are able to implement integration optimally. Some teachers find it difficult because of limited understanding of science concepts or the inability to relate them to religious values. Therefore, there needs to be continuous teacher training, development of integrative based learning modules, and strengthening of science and religious literacy for educators.

From a policy perspective, the integration of science and religion requires synergy between subjects. PAI cannot work alone in conveying this integrative value, but must be supported by other subjects such as Science, Social Studies, and Civics.

Cross-disciplinary or collaborative learning between teachers needs to be built so that this integrative vision does not only occur in PAI classes, but colors the entire school ecosystem.

In this context, the project-based learning model or STEM with a religious approach can be a very potential alternative method. Students can conduct environmental observations, design technology-based solutions, and relate them to Islamic values such as trust, responsibility, and concern for Allah's creatures. This study shows that this model has a significant impact on students' motivation and depth of understanding of Islamic teachings in the context of real life.

This research has a common thread with research conducted by (Abas et al., 2024) which highlights the integration of PAI with the STEM (Science, Technology, Engineering, and Mathematics) approach. In Abas' research, the main focus is on the STEM based curriculum associated with Islamic values to improve students' scientific literacy. Although offering integrative ideas, Abas' approach is more technocratic and focuses on aspects of curriculum structure and improving 21st century skills. In contrast, this research develops a more holistic approach, not only based on the curriculum, but also touching on aspects of teacher perception, spiritual approaches, and transcendental values that are the main spirit in PAI learning.

Furthermore, in the research (Azizah, 2021) which discusses the integration of Islamic values in science education in integrated Islamic-based schools, it was found that religious values are often only attached normatively without deep elaboration. This study criticizes this and offers learning that truly combines the substance of Islamic teachings with scientific exploration in an integrated manner. For example, discussions of the themes of creation, environment, and health are not only taught in Islamic Religious Education, but are strengthened with scientific evidence and reflective discussions that guide students to awareness of monotheism and social responsibility.

It is also different from research (Mahbuddin, 2020) which highlights integration in the realm of digital learning media, this study expands attention to direct instruction approaches, collaborative strategies, and active involvement of teachers and students in the integrative thinking process. The implications not only impact learning outcomes, but also on strengthening students' religious and scientific identities, which are important aspects in forming a whole and resilient generation in the modern era.

From the comparison, it can be concluded that this study fills the gap in the literature by presenting an integrated approach that is multidimensional epistemological, pedagogical, and practical while placing Islamic and scientific values in a balanced and dialogical position. This study also complements and expands previous studies that tend to focus on one aspect (for example, curriculum alone, or character alone), by offering a comprehensive implementation model that can be flexibly adapted in various educational institutions.

The excellence of this research lies in its ability to offer a strategic and realistic design that can be applied by teachers at various levels of education, both public schools and madrasahs. This research does not stop at the conceptual level, but maps

practical needs and real challenges in the field that can be used as a basis for developing national education policies. The novelty of this point is the emergence of recommendations for an integrative learning model that combines Islamic values with a scientific approach in a concrete way, including lesson plan designs, examples of material associations, and integrative evaluation techniques. This is a new contribution to contemporary Islamic education literature which has so far been largely normative and theoretical.

Discussion

This study found that the integration of science and religious values in Islamic Religious Education learning is able to significantly eliminate the dichotomy between religious knowledge and general knowledge. Teachers who apply an integrative approach demonstrate high pedagogical mastery and scientific literacy, and are able to facilitate a holistic learning process both from the cognitive, affective, and spiritual aspects. Islamic Religious Education learning becomes more contextual and relevant because students can connect religious teachings with scientific phenomena and real life. This study also found that an integrative approach based on monotheism not only strengthens students' faith but also increases their interest in learning and scientific analysis skills.

This finding is in line with the classical thinking of Muslim scholars such as Ibn Sina and Al-Ghazali, who rejected the separation between religion and science, and viewed science as a path to closeness to God. This study extends the contributions of previous studies, such as those conducted by (Pawartani & Subuatningsih, 2024), by not only focusing on the curriculum, but also on the implementation and teacher competency aspects. Different from research (Dodego, 2023) which is limited to Islamic boarding schools, this study proves that the integrative approach can also be applied effectively in public schools and madrasas. In addition, the approach developed in this study is more comprehensive than the study (Kurniasih et al., 2025) which is still focused on the character aspect or technocratic curriculum. By combining epistemological, pedagogical, and spiritual aspects simultaneously, this study presents a more complete integrative approach that can be adapted to various educational contexts.

One of the main strengths of this study is the multidimensional approach used to combine conceptual literature review with theoretical analysis of classroom practices. This study presents a critical analysis that not only describes the concept of integration, but also compiles applicable recommendations that can be implemented by teachers. Another advantage lies in the tauhidic framework used as an epistemological basis, making integration not just a learning strategy, but also a comprehensive way of looking at life. However, the limitations of this study lie in the absence of empirical data from the field in the form of interviews or direct observations of teachers and students. In addition, because it is based on literature studies, the direct influence on learning outcomes cannot be measured quantitatively, so field tests are needed in the future.

This study implies that the development of Islamic education that is relevant to the challenges of the times must adopt an integrative approach that combines faith and science functionally. To that end, educational policies need to encourage collaboration between teachers across subjects (Islamic Religious Education and Science) and the development of a thematic and transdisciplinary curriculum. Educational institutions also need to provide intensive training for teachers so that they have the competence to link Islamic values with scientific materials. Recommendations for further research are to conduct classroom action research-based field studies to test the effectiveness of this integration model on learning motivation, understanding of religious and scientific concepts, and character formation of students. Further research also needs to develop modules and learning tools based on integration that can be tested at various levels of education.

CONCLUSION

Based on the results of the study and discussion, it can be concluded that the integration of scientific knowledge and religious values in Islamic Religious Education (PAI) learning is a relevant and strategic approach in responding to the challenges of educational dualism and the crisis of spirituality in the modern era. This approach not only strengthens the cognitive and affective aspects of students, but also forms a complete character through a holistic understanding of revelation and scientific reality. PAI learning integrated with science is able to foster critical awareness, broaden scientific insight, and instill contextual Islamic values in everyday life. This study confirms that the integrative concept has a strong epistemological basis in the treasury of Islamic thought and is applicable in learning practices in schools, although it is still faced with challenges such as limited teacher competence and minimal integrative teaching tools. The advantages and novelty of this study lie in the formulation of an integrative learning model that combines the monotheistic, scientific, and pedagogical approaches synergistically, so that it can be an important contribution to the development of a more relevant, innovative, and transformative PAI curriculum and learning strategy in the midst of the dynamics of the times.

REFERENCES

- Abas, S., Alirahman, A. D., & Maburur, H. (2024). Humanizing STEM-Based Learning (Science, Technology, Engineering, and Mathematics) for the Transformation of Islamic Education in the 21st Century. *Educan: Jurnal Pendidikan Islam*, 8(1), 98–120.
- Afriyose, N. (2023). *Pengembangan Media Pembelajaran Berbasis Linktree Melalui Discovery Learning Untuk Meningkatkan Hasil Belajar Geografi Di Sekolah Menengah Atas*. UNIVERSITAS LAMPUNG.
- Ainun, F. P., Mawarni, H. S., Sakinah, L., Lestari, N. A., & Purna, T. H. (2022). Identifikasi transformasi digital dalam dunia pendidikan mengenai peluang dan tantangan di era disrupsi. *Jurnal Kewarganegaraan*, 6(1), 1570–1580.
- Azizah, A. A. M. (2021). Integrasi nilai-nilai keislaman dalam pembelajaran IPS pada

- kurikulum 2013. *Elementeris: Jurnal Ilmiah Pendidikan Dasar Islam*, 3(1), 23–35.
- Dodego, S. H. A. (2023). *Pemikiran Pendidikan Islam Harun Nasution dan Implementasinya di Perguruan Tinggi Agama Islam (Studi Kasus di SPs UIN Syarif Hidayatullah Jakarta)*. FITK UIN Syarif Hidayatullah Jakarta.
- Gani, A., Oktavani, M., & Suhartono, S. (2024). Pendidikan Agama Islam: Fondasi Moral Spiritualitas Bangsa. *Al-I'tibar: Jurnal Pendidikan Islam*, 11(3), 289–297.
- Hakim, L. (2020). *Pendidikan Islam Integratif: Best Practice Integrasi Pendidikan Agama Islam dalam Kurikulum Pendidikan Tinggi*. Gestalt Media.
- Hariyanti, E., & Roqib, M. (2024). Relevansi Studi Integrasi Islam, Sains, dan Budaya Nusantara dalam Pendidikan Islam di Era Global. *Transformasi Manageria: Journal of Islamic Education Management*, 4(2), 463–475.
- Hidayat, S. (2021). Integrasi Nilai Islam Dalam Pendidikan: Pembelajaran Integratif di SMA Islam Al-Muttaqin Kota Tasikmalaya. *TADRIS: Jurnal Pendidikan Islam*, 16(1), 141–156.
- Kurniasih, D. D., Khoriyadi, I., Suratin, S. I., & Fakhurridha, H. (2025). INTERVENSI KEBIJAKAN POLITIK DALAM REKONSTRUKSI KURIKULUM PENDIDIKAN AGAMA ISLAM: TELAAH KRITIS DAN KONTEKSTUAL. *Raudhah Proud To Be Professionals: Jurnal Tarbiyah Islamiyah*, 10(1), 356–366.
- Mahbuddin, A. N. G. (2020). Model Integrasi Media dan Teknologi dalam Pembelajaran PAI. *Al-Mudarris (Jurnal Ilmiah Pendidikan Islam)*, 3(2), 183–196.
- Nasir, M., Mulyono, Y., & Nastiti, L. R. (2020). Reconstructing Distinction Pattern of Science Education Curriculum in Indonesian Islamic Universities: An Integrated Paradigm for Science and Religion. *Journal of Turkish Science Education*, 17(1), 11–21.
- Pawartani, T., & Suciptaningsih, O. A. (2024). Pengembangan kompetensi guru untuk mendukung implementasi kurikulum merdeka. *JIIP-Jurnal Ilmiah Ilmu Pendidikan*, 7(3), 2182–2191.
- Riduwan, R., & Mahmud, A. (2023). Integrasi Agama dan Sains dalam Sistem Pendidikan Model Kuttub. *EL-BANAT: Jurnal Pemikiran Dan Pendidikan Islam*, 13(1), 85–104.
- Supriatna, J. (2021). *Pengelolaan lingkungan berkelanjutan*. Yayasan Pustaka Obor Indonesia.
- Syarifah, S., & Misbah, M. (2024). Menjembatani Dikotomi Ilmu di Madrasah. *Al Ashriyyah*, 10(2), 157–170.