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Integration of Islamic Science and General Sciences in the Curriculum of Islamic Boarding Schools in Central Kalimantan Islamic Boarding Schools

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ABSTRACT

Integrating Islamic and general sciences has become increasingly important for Islamic boarding schools to meet contemporary educational demands while maintaining their religious identity. However, translating this integration into curriculum planning and daily learning practices remains a significant challenge. This study examines the implementation of Islamic and general science integration in the curriculum of Nahdlatussalam Anjir Serapat Tengah Islamic Boarding School in Central Kalimantan, focusing on its implementation, challenges, and institutional strategies. Employing a qualitative case study approach, data were collected through in-depth, semi-structured interviews with pesantren caregivers, religious and general subject teachers, and students. The data were analyzed thematically through data reduction, data presentation, and conclusion drawing. The findings reveal that curriculum integration is implemented through balanced scheduling of religious and general subjects, flexible learning materials, contextual teaching methods, and the incorporation of Islamic values into general science instruction. Students generally respond positively to this approach, reporting improved understanding of the relationship between religious and academic knowledge, increased motivation to learn, and more opportunities to apply knowledge in everyday life. Nevertheless, implementation faces challenges related to intensive learning schedules, student fatigue, and teachers' ability to connect different knowledge domains. The pesantren addresses these challenges through flexible scheduling, additional student guidance, teacher collaboration, and internal professional development. This study implies that effective knowledge integration requires alignment between curriculum design, pedagogical practices, and institutional capacity to foster balanced intellectual, moral, and spiritual development.

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INTRODUCTION

Education is the main foundation for high-quality and highly competitive human development (Humaida et al., 2026; Isnaeni et al., 2025; Zahwa et al., 2025) The development of science, technology, and information requires every educational institution to not only transfer knowledge, but also prepare students to be able to think critically, creatively, and adaptively to the changing times (Lase, 2019). The curriculum plays a role as the main framework in the educational process, because through the curriculum, learning can be directed so that students' knowledge, skills, and attitudes are formed systematically (Amalia, 2026; Astra et al., 2024; Hussain, 2025; Kao et al., 2023; Kosasih et al., 2026) Challenges arise when education is required to be able to balance the mastery of general knowledge that is global and spiritual values that become moral handles, so that graduates are not only intellectually intelligent, but also emotionally and religiously mature (Andriyani & Leksono, 2024; Far-Far et al., 2026; Wibowo & Saliman, 2025; Widiyanto et al., 2024; Yanti et al., 2024) Global pressures and increasingly fierce competition make the integration between academic learning and character education a strategy that needs to be considered by every educational institution (Ardianto et al., 2026; Danuwara & Giyoto, 2024; Ismawati, 2023; Permadi et al., 2025).

Pesantren is one of the educational institutions that has a unique and strategic role in forming a well-informed religious generation (Alam et al., 2026; Djamaluddin et al., 2024; Efendi et al., 2026; Niswah et al., 2025) The tradition of Islamic boarding schools emphasizes religious learning through the yellow book (*kitab kuning/turots*), *tahfiz* of the Qur'an (memorizing), jurisprudence, morals, and other Islamic studies, which equip students with a deep understanding of spiritual values (Arif et al., 2025; Hasbunallah et al., 2023; Yusri, 2020) Challenges arise when students are faced with the need to master general sciences, such as mathematics, science, language, and social sciences, so that they are able to compete outside the pesantren environment and adjust to the development of modern society (Anilon et al., 2026; Arif, Aziz, et al., 2024; Hasibuan et al., 2024; Jubba et al., 2022; Miftahuddin et al., 2024) The integration of Islamic science and general science is a means to create a balance between spiritual, intellectual, and social aspects (Amrillah et al., 2024). This balance is expected to be able to prepare graduates who not only understand religion deeply, but are also able to play an active and productive role in professional and social life. However, discussions on this integration have not sufficiently explained how religious and general knowledge can be systematically connected within pesantren learning practices, particularly in terms of curriculum implementation, teaching strategies, and the development of students' academic competencies alongside their religious understanding (Arif, Kartiko, et al., 2024; Maisura et al., 2026). This gap indicates the need for further examination of how pesantren can translate the concept of knowledge integration into educational practices that accommodate both Islamic values and contemporary academic demands. Such an approach is expected to prepare graduates who not only possess a deep understanding of religion but are also capable of playing active and productive roles in professional and social life.

The Nahdlatussalam Anjir Serapat Tengah Islamic Boarding School in Central Kalimantan implements a learning model that combines the two domains of knowledge. The curriculum of this pesantren is designed to unite religious education and general education systematically, starting from learning the yellow book and tahfiz of the Qur'an to science, mathematics, language, and social science subjects. Teaching strategies in this pesantren include scheduling that regulates the balance of time between religious and academic activities, interactive learning methods, and guidance approaches that facilitate the development of student character. This approach aims to enable students to interpret religious lessons in an applicative manner, as well as master general knowledge that is relevant to daily life and face social challenges outside the pesantren.

The focus of the research is directed at the practice of integrating Islamic science and general science at the Nahdlatussalam Anjir Serapat Tengah Boarding School. The teaching process, curriculum arrangements, learning methods, and perceptions of teachers and students are the main focus in understanding the implementation of the integration(Bahri et al., 2026; Mubarok & Nadhir, 2025). This research aims to identify the forms of implementation, obstacles, and strategies involved in integrating

Islamic and general sciences within the pesantren curriculum. Specifically, it examines how the integration is translated into curriculum planning, learning activities, and educational practices, as well as how pesantren respond to challenges arising from modernization while maintaining their Islamic identity. The scientific contribution of this research lies in providing an empirical understanding of the relationship between curriculum design, implementation practices, and institutional strategies in integrating religious and general knowledge within the pesantren education system. The findings are expected to contribute to the development of a more adaptive and integrative pesantren curriculum by identifying practical approaches, implementation challenges, and strategic considerations that can inform curriculum evaluation and improvement in similar Islamic educational institutions.

METHODS

This study uses a qualitative approach of case studies to understand in depth the integration of Islamic science and general science in the curriculum of the Nahdlatussalam Anjir Serapat Tengah Islamic Boarding School. The case study approach was chosen because the research focuses on phenomena that occur specifically in one educational institution, so that it allows researchers to explore the practices, experiences, and perceptions of teachers and students related to the implementation of the pesantren curriculum as a whole. Case studies allow researchers to obtain rich and contextual data so that they can capture the complexity of the process of integrating religious education and general science in Islamic boarding schools.

The Data Collection Technique in this study uses in-depth interviews. Interviews were conducted with several main informants, namely pesantren caregivers, general subject teachers, religious teachers, and students. The questions focused on their experience in the implementation of the curriculum, the learning methods used, the time allocation for each subject, and their perception of the effectiveness of integrating Islamic and general sciences. Interviews are semi-structured to provide flexibility for informants to convey their experiences and views, while ensuring that research topics can be fully covered.

Data Analysis techniques follow the stages commonly used in case study research, namely data reduction, data presentation, and conclusion drawing (Miles & Huberman, 1992). Data reduction is carried out by selecting relevant information from interview transcripts and grouping data based on specific themes or categories, such as curriculum integration, teaching methods, and learning challenges. The presentation of data is carried out in the form of a descriptive narrative that describes the process of integrating curriculum and learning practices in Islamic boarding schools. Conclusions are drawn through thematic analysis to find patterns, relationships, and an in-depth understanding of how the integration of Islamic science and general science works, as well as the factors that influence its success.

FINDINGS AND DISCUSSION

Findings

Integration of Islamic and General Science Curriculum

The Nahdlatussalam Anjir Serapat Tengah Islamic Boarding School implements a curriculum that emphasizes a balance between religious education and general education. This curriculum is structured in such a way that students get a sufficient portion to master Islamic sciences, such as tahfiz of the Qur'an, jurisprudence, morals, and tafsir, as well as studying general sciences, including mathematics, science, Indonesian, English, and social sciences. One of the caretakers of the pesantren explained, *"We arrange a daily schedule so that students can learn books and general lessons alternately. The goal is so that they don't lose focus on one field, but also don't be overwhelmed by a lot of material."*

This statement emphasizes that curriculum integration is carried out systematically and is designed to build academic and spiritual abilities at the same time, so that students are able to follow the learning of both domains of knowledge without feeling burdened or losing focus on religious teachings.

Curriculum flexibility is one of the main strategies in the implementation of this integration. The subject matter is arranged in such a way that it can adjust to the needs, abilities, and level of development of students. The general subject teacher explained,

> *"We adjust the teaching method based on the level of ability of the students. If they have trouble understanding science or math concepts, we try to relate them to examples from everyday life or religious teachings so that they are easier to understand."*

This shows that curriculum integration is not only seen from lesson scheduling, but also from the way teachers deliver material. This contextual approach allows students to see the relationship between general knowledge and Islamic values, so that learning feels more meaningful and applicative.

In addition, curriculum integration is also implemented through the adjustment of study time that pays attention to the concentration ability of students. Religious and general subject materials are given alternately in a day, so that students have enough time to process information from both fields of knowledge. A caregiver explained, *"We noticed that the students' brains need time to rest and digest the material. So, we interspersed religious lessons with general lessons so that they stay fresh and can understand the material well."*

This strategy helps students not to feel bored, increase learning effectiveness, and foster interest in learning in both domains of knowledge.

Apart from the schedule and teaching methods, the curriculum is also designed so that the two fields of knowledge complement each other. For example, fiqh or moral material can be associated with learning mathematics, science, or language, so that students can understand Islamic values in real practice. The religious teacher stated, *"We often give examples of the application of religious knowledge in daily life, such as calculating zakat or understanding the rules of muamalah, so that students also learn to count and logic at the same time."*

This approach strengthens students' understanding that religious science and general science are not separate domains, but support each other in forming academic competence and religious character.

Overall, the integration of the curriculum at the Nahdlatussalam Anjir Serapat Tengah Islamic Boarding School is implemented through a combination of balanced scheduling, material flexibility, contextual teaching methods, and strategies to link religious science with general knowledge. This model shows that pesantren not only emphasizes the mastery of religious knowledge, but also encourages the development of students' academic abilities so that they can compete intellectually, have character, and be ready to face the challenges of daily life.

Learning Methods and Teacher Approaches

The integration of Islamic science and general science at the Nahdlatussalam Anjir Serapat Tengah Islamic Boarding School is clearly seen in the teaching methods applied by teachers. Religious teachers and general subject teachers strive to associate academic material with Islamic values so that learning becomes more meaningful and applicative. One of the religious teachers said,

> *"When explaining the concept of fiqh or morality, we often give examples of its application in daily life. For example, calculating zakat and alms uses mathematical calculations so that students understand practically. We want students not only to know theory, but also to be able to apply religious knowledge in their daily activities."*

This statement shows that teachers are trying to bridge academic and spiritual understanding so that students can see the real relationship between the two realms of knowledge.

The interactive approach is one of the main strategies so that students can grasp academic concepts as well as Islamic values. The general subject teacher added,

> *"We always try to make science or language materials more interesting by providing examples that are relevant to the lives of students in Islamic boarding schools. For example, when studying ecosystems, we discuss how to maintain the environment according to Islamic teachings. When learning a language, we insert words or texts that contain moral messages and religious teachings."*

This kind of teaching strategy encourages students to interpret learning contextually and internalize Islamic values at the same time as mastering academic materials.

In addition to the interactive approach, teachers also use group discussion methods, simulations, and hands-on practice so that students are active in the learning process. A religious teacher said,

> *"We often invite students to discuss to solve problems related to religion and daily life. For example, calculating professional zakat or discussing how to maintain the cleanliness of the environment. Discussions like this help students think critically as well as understand Islamic teachings practically."*

Meanwhile, the general science teacher added,

> *"In science lessons, we often do simple experiments that are connected to Islamic concepts, for example making a model of the water cycle while explaining the importance of protecting nature as a mandate of Allah."*

A personal approach and individual guidance are also applied to help students who need more attention, both in understanding religious and general science materials. A teacher stated,

> *"We provide special time for students who have difficulty understanding certain lessons. Religious teachers and general teachers coordinate with each other so that the approach given is consistent and supportive of each other."*

This strategy ensures that every student can follow an integrative curriculum without being left behind, while fostering confidence and motivation to learn.

Overall, the learning method at the Nahdlatussalam Anjir Serapat Tengah Islamic Boarding School prioritizes integration, interactivity, and relevance of practice. The use of contextual approaches, discussions, hands-on practice, and individual guidance shows that teaching in pesantren does not only focus on mastery of material, but also on the application of Islamic values in daily life. This model encourages students to understand that religious science and general science complement each other, so that academic abilities develop along with strengthening character and spirituality.

Students' Perception of Curriculum Integration

The students of the Nahdlatussalam Islamic Boarding School Anjir Serapat Tengah showed a generally positive response to the implementation of curriculum integration between Islamic and general sciences. Initially, many students admitted that they had difficulty adjusting to a busy study schedule, because they had to divide their time between religious activities such as memorizing the Qur'an, studying the yellow book, and understanding morals, with general lessons that included mathematics, science, language, and social sciences. One of the students explained,

> *"At first, it felt difficult because of many subjects, but after getting used to it, I felt that religious science and general science supported each other. For example, learning science is easier because it is often associated with examples from Islamic teachings."*

This experience shows that curriculum integration is not just an addition of subjects, but provides additional meaning to the learning process. Students began to understand that academic materials can be applied in daily life in accordance with religious principles. For example, in mathematics lessons, students can learn to calculate zakat or alms, while in science, the concept of ecosystem and environment is associated with the mandate to protect nature according to Islamic teachings. Another student added, *"Sometimes I have trouble understanding English lessons, but when the teacher gives examples of stories or texts related to Islamic morals and values, the material becomes easier to understand and does not feel boring."*

Curriculum integration also has a positive impact on students' learning motivation. They feel they have a complete understanding, not just about academics or religion separately. A female student stated,

> *"I feel happy because learning religion is not only memorization, but can also be applied in daily life. When I study general lessons, I can see the relationship between religious values and school materials, so learning feels more meaningful."*

This shows that an integrative approach helps students to internalize moral and spiritual values while developing cognitive abilities.

In addition, the perception of students also reflects their ability to apply the knowledge learned. Many students mentioned that they are now better able to solve practical problems by combining religious understanding and general knowledge. A student said,

> *"Now I can use science to maintain the cleanliness and health of the environment in the pesantren, while still following the rules and manners of Islam. This makes me feel that the knowledge I learned is more real and useful."*

This statement shows that curriculum integration not only affects academic ability, but also shapes the behavior and character of students, so that they are able to carry out Islamic values in an applicative manner in their daily lives.

Overall, students' perception of curriculum integration confirms that this learning model is effective in balancing intellectual and spiritual development. Although it felt challenging at first, the adaptation that took place allowed students to understand the relationship between religious science and general science more completely. This integration helps them view science as something holistic, not separate, and fosters awareness that science can be used for useful practices, in line with Islamic principles.

Challenges and Integration Strategies

Although the integration of Islamic and general sciences at the Nahdlatussalam Anjir Serapat Tengah Islamic Boarding School went quite well, some challenges still arose during the learning process. One of the main challenges is the adjustment of time between religious subjects and general science. The daily schedule of the students, with many subjects and additional activities such as memorizing the Qur'an, recitation of the book, and worship practices, makes some students experience fatigue. The caretaker of the pesantren said, *"Sometimes students are tired because they have to participate in many activities at once. We are constantly looking for ways to keep the schedule balanced without weighing them down."*

This condition shows that even though the curriculum has been systematically designed, the physical and mental factors of the students still need to be considered so that learning can take place effectively.

Another challenge found is related to the competence of teachers in effectively linking religious and general sciences. Some teachers admitted that it requires creativity, mature material readiness, and the ability to find relevant examples so that integration feels natural and easy for students to understand. A general subject teacher stated, *"Sometimes we have to prepare additional examples or make illustrations that connect science or mathematics materials with Islamic values. Not all materials are easy to relate to, so teachers have to think creatively to keep the integration going."*

This emphasizes that the success of curriculum integration is highly dependent on the ability of teachers to combine two domains of knowledge contextually and applicatively.

In facing these challenges, Islamic boarding schools implement several strategies to ensure that the learning process continues to run effectively. The first strategy is to set a flexible schedule. Academic and religious activities are arranged in such a way that students have enough time to study, rest, and repeat difficult material. One of the caregivers said, *"We adjust the schedule each semester and give extra time for subjects that are considered more challenging. That way, students not only learn, but also have the opportunity to understand the material in depth."*

The second strategy is extra guidance for students who are experiencing difficulties. Religious teachers and general teachers work together to provide additional guidance through individual or small group consultations. A teacher explained, *"We always provide special time for students who are struggling, both in general subjects and religious lessons. This approach ensures they are not left behind and remain motivated to follow an integrative curriculum."*

In addition, internal training for teachers is an important strategy to improve the quality of integration. Teachers regularly share experiences, develop new teaching methods, and develop relevant teaching materials to connect religious and general sciences. A religious teacher added, *"We*

hold regular meetings between teachers to discuss material integration strategies. This discussion is very helpful, because teachers can give each other ideas so that learning is more effective and fun for students."

Overall, challenges that arise in curriculum integration—ranging from student time management, burnout, to teacher competence—are addressed through a combination of flexible scheduling, additional guidance, and teacher professional development. These strategies ensure that the integration of Islamic science and general science is not only theoretical, but also effective in practice, forming students who have good academic mastery as well as a strong religious character.

Table 1. Summary of Research Findings on Islamic and General Science Integration at Nahdlatussalam Anjir Serapat Tengah Islamic Boarding School

Research Aspects	Main Findings	Implementation and Supporting Evidence
Curriculum Integration	Religious and general sciences are integrated through balanced curriculum arrangements.	Alternating subject schedules, flexible learning materials, and connections between Islamic teachings and general knowledge.
Learning Methods and Teacher Approaches	Teachers apply contextual, interactive, and practice-oriented learning approaches.	Group discussions, scientific experiments, contextual examples, and individual student guidance.
Students' Perceptions	Students generally demonstrate positive responses toward curriculum integration.	Improved understanding of the relationship between religious and general sciences, learning motivation, and practical application of knowledge.
Challenges and Integration Strategies	Implementation faces challenges related to learning schedules, student fatigue, and teacher competence.	Flexible scheduling, additional student guidance, teacher collaboration, and internal professional development.

Discussion

The integration of the curriculum between Islamic science and general science applied at the Nahdlatussalam Anjir Serapat Tengah Islamic Boarding School shows an educational model that is able to answer the learning needs of students in a balanced manner between intellectual development and the formation of religious character (Aziz et al., 2025; Maarif et al., 2025; Matos, 2025; Sarbini et al., 2025; Tanjung et al., 2023). The design of the curriculum that unites the two scientific domains is not only reflected in the structure of the learning schedule, but also seen in the philosophy of pesantren education which views religious science and general science as a complementary unit. This is also proven in a study by Wandawari et al. (2025), where the curriculum at the Ulul Albab Makassar Modern Islamic Boarding School succeeds in integrating religious knowledge and general knowledge through a holistic approach, thus enabling students to develop relevant character, skills, and knowledge. This approach is in line with the goal of Islamic education which does not separate the worldly and ukhrawi aspects, but rather places both as the foundation for the formation of a complete student's personality, knowledge, and morals (Nabila, 2021).

The application of curriculum flexibility is the main strength in the success of this integration. Adjustment of the material to the ability of the students shows that the learning process is not uniform, but responsive to the individual needs of the students. Teachers who are able to relate the concepts of mathematics, science, and language to examples of Islamic life and teachings have created a more meaningful learning experience (Junaidi et al., 2024). Learning Islamic religious education must be able to transform something that is still cognitive into meaning and value and must be internalized in the learner. Science and religion in the Islamic perspective have the same metaphysical basis, with the purpose of knowledge revealed or sought is to reveal the verses of God, the motivation behind the search for mathematical knowledge-the effort to know the verses of God in the universe (Chanifudin

& Nuriyati, 2020). Contextual learning like this has been proven to improve students' understanding, because the material is not only accepted as abstract knowledge, but as part of the reality of daily life that has moral and spiritual value.

The learning methods used by teachers also strengthen the effectiveness of curriculum integration. Interactive approaches, discussions, simulations, simple experiments, and direct practice encourage students to become active subjects in learning (Nurdiniah, 2024). The use of interactive learning media has been shown to improve the quality of learning, facilitate a deeper understanding of concepts, and students' long-term memory (Wildan & Bunyamin, 2025). These activities foster critical thinking skills while building religious awareness through the application of Islamic values in every academic material. The learning process is no longer centered on memorization alone, but on understanding, appreciating, and applying knowledge in real life in the lives of students in the pesantren environment (Satiadharmanto & Rahman, 2024). And then it is hoped that Islamic education in Islamic boarding schools will have a significant impact on character formation, increase spiritual depth, moral virtue, independence, social skills, and understanding of Islamic teachings (Triyono & Mediawati, 2023).

The positive response of students to the integration of the curriculum shows that this learning model is able to increase learning motivation and form a holistic perception of science. The initial adaptation that was felt to be heavy gradually turned into an understanding that religious science and general science support each other (Wanida & Anwar, 2024). This awareness strengthens the internalization of Islamic values while developing the cognitive abilities of students. The change in the attitude of students who have begun to use science to maintain the pesantren environment, apply mathematical calculations to worship practices, and link language lessons to the formation of morals reflects the success of curriculum integration in shaping behavior and character (Huda et al., 2025).

The challenges that arise in the implementation of curriculum integration, especially related to the density of the learning activity schedule, the level of student fatigue due to the high academic load, and the readiness of teachers in connecting two different scientific domains, show that the implementation of curriculum integration cannot be done simply, but requires careful and continuous planning, management, and evaluation (Wardatushobariah et al., 2025). To answer these challenges, the implementation of a more flexible schedule management strategy, the provision of additional guidance for students who have learning difficulties, and the implementation of professional training for teachers to have integrative competencies are determining factors in maintaining the sustainability and effectiveness of the implementation of curriculum integration. In addition, the collaboration built between religious subject teachers and general subject teachers reflects the seriousness of educational institutions in maintaining the quality of the overall learning process and ensuring that every student gets optimal learning opportunities without anyone being left behind in the educational process (Nasution et al., 2025).

The educational model applied at the Nahdlatussalam Anjir Serapat Tengah Islamic Boarding School shows that Islamic boarding schools are able to adapt to the demands of the times without abandoning their Islamic identity. The integration of Islamic science and general science is not just a union of subjects, but an education system that forms the personality of students in a balanced, knowledgeable, moral, competitive manner, and ready to face the challenges of social, academic, and spiritual life in an integrated manner.

CONCLUSION

This study shows that the integration of the curriculum between Islamic science and general science at the Nahdlatussalam Anjir Serapat Tengah Islamic Boarding School has been carried out systematically and effectively through balanced curriculum planning, material flexibility, contextual learning methods, and collaboration between religious teachers and general subject teachers. The implementation of this integration is able to improve the academic understanding of students while strengthening religious character, forming a holistic way of thinking, and fostering awareness that science has a close relationship between intellectual, moral, and spiritual aspects. The positive response

of students, the support of varied teaching methods, and strategies for handling learning challenges show that this integrative education model plays a significant role in creating a meaningful and applicable learning process for the lives of students in the pesantren environment.

Although the results of the study show positive findings, this study has limitations in the scope of the research location that only focuses on one Islamic boarding school institution so that the generalization of the findings is still limited, as well as the limited time of data collection that has not fully described the long-term development of the results of curriculum integration. The next research is suggested to expand the research object on several Islamic boarding schools or other Islamic educational institutions in order to obtain a broader picture of the effectiveness of the curriculum integration model, use a mixed method approach to measure the impact of integration on academic achievement and character formation of students in a more measurable manner, and explore more deeply the role of institutional policies and teacher competencies in maintaining the sustainability of the implementation of an integrative curriculum in the Islamic boarding school education system.

Conflicts of Interest: The authors declare no conflict of interest.

REFERENCES

Alam, D. W. S., Hilmi, M., & Thabrani, A. M. (2026). Integration of Religious Moderation and Ecological Education from a Social Ecology Perspective. *Attaqwa: Jurnal Ilmu Pendidikan Islam*, *22*(2), 179–195. https://doi.org/10.54069/attaqwa.v22i2.1158

Amalia, E. R. (2026). Religious Pluralism in Indonesia's National Curriculum: A Critical Review of Interfaith Religious Education. *Attaqwa: Jurnal Ilmu Pendidikan Islam*, *22*(2), 162–178. https://doi.org/10.54069/attaqwa.v22i2.1169

Amrillah, R., Vionita, D., & Rayhan, M. (2024). Harmonisasi Pengetahuan Keislaman: Pandangan M. Amin Abdullah tentang Integrasi Ilmu dalam Islam. *Tafáqquh: Jurnal Penelitian Dan Kajian Keislaman*, *12*(1), 84–96. https://doi.org/10.52431/tafaqquh.v12i1.2708

Andriyani, F., & Leksono, A. A. (2024). Effective Management in the Implementation of Link and Match Curriculum for Quality Graduates. *Journal of Education and Learning Innovation*, *1*(2), 151–160. https://doi.org/10.59373/jelin.v1i2.45

Anilon, B. J., Sairin, S., Abdulkarim, K. A., Widigdo, M. S. A., & Suud, F. M. (2026). Academic Commitment of Muslim Filipino Students in an Islamic Boarding School: A Phenomenological Study at Islamic Boarding School. *Nazhruna: Jurnal Pendidikan Islam*, *9*(1), 227–245. https://doi.org/10.31538/nzh.v9i1.302

Ardianto, A., Rofiq, M. H., Ismawati, I., Mubin, N., & Romadhan, M. S. (2026). Konsep Zikir dalam Tarekat Qadiriyah Naqsabandiyah dan Implikasinya terhadap Pembentukan Kepribadian Spiritual: The Concept of Zikr in the Qadiriyah Naqshbandiyah Order and Its Implications for the Formation of Spiritual Character. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, *9*(1), 62–75. https://doi.org/10.54069/attadrib.v9i1.1172

Arif, M., Aziz, M. K. N. A., & Abdurakhmonovich, Y. A. (2024). Trend Strategy to Prevent Bullying in Islamic Boarding Schools (Pesantren). *Jurnal Ilmiah Peuradeun*, *12*(2), 639–670. https://doi.org/10.26811/peuradeun.v12i2.1087

Arif, M., Kartiko, A., Rusydi, I., Zamroni, M. A., & Hasan, M. S. (2024). The Existence of Madrasah Ibtidaiyah Based on Pesantren: Challenges and Opportunities in The Digital Era. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, *5*(4), 367–382. https://doi.org/10.31538/munaddhomah.v5i4.1401

Arif, M., Nasir, R., & Ma'arif, M. A. (2025). The Kitab Kuning Learning Model in the Development of Student Expertise in Pesantren-Based Higher Education. *Nazhruna: Jurnal Pendidikan Islam*, *8*(1), 52–74. https://doi.org/10.31538/nzh.v8i1.8

Astra, N. P. B., Hafid, E., & Suban, A. (2024). Scout Extracurricular Curriculum Management in Improving Student Discipline in Madrasah. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, *5*(2), 161–172. https://doi.org/10.31538/munaddhomah.v5i2.810

Aziz, M., Napitupulu, D. S., & Parapat, F. A. (2025). The Influence of Teacher Communication Patterns in Aqidah Akhlak Education on Students' Academic Achievement. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, *8*(1), 71–86. https://doi.org/10.54069/attadrib.v8i1.840

Bahri, S., Satriani, S., & Hasbi, M. (2026). Transforming Madrasah Education: Integrating Technology, Governance, and Commitment within Management Information Systems. *Dirasah International Journal of Islamic Studies*, *4*(1), 49–66. https://doi.org/10.59373/drs.v4i1.73

Chanifudin, C., & Nuriyati, T. (2020). Integrasi Sains dan Islam dalam Pembelajaran. *ASATIZA: Jurnal Pendidikan*, *1*(2), 212–229. https://doi.org/10.46963/asatiza.v1i2.77

Danuwara, P., & Giyoto, G. (2024). Penanaman Karakter Religius dan Karakter Disiplin Melalui Pembiasaan Sholat Dhuha Di Madrasah Ibtidaiyah. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, *7*(1), 31–40. https://doi.org/10.54069/attadrib.v7i1.716

Djamaluddin, B., Bahri, S., Halim, A., Nurlailah, & Chabibi, M. (2024). Deradicalization Through Multicultural Islamic Religious Education at The Islamic University. *Nazhruna: Jurnal Pendidikan Islam*, *7*(3), 646–663. https://doi.org/10.31538/nzh.v7i3.34

Efendi, R., Bakar, M. A., Sunusi, I., & Pranto, U. H. (2026). From Technocentric Learning to Spiritual Integration: Rethinking Innovation in Islamic Religious Education. *Attaqwa: Jurnal Ilmu Pendidikan Islam*, *22*(2), 196–211. https://doi.org/10.54069/attaqwa.v22i2.1110

Far-Far, G., Kubangun, N. A., & Biczo, G. (2026). Application of the Mind Mapping Learning Model to Improve Student Learning Outcomes. *International Journal of Social Learning (IJSL)*, *6*(2), 250–263. https://doi.org/10.47134/ijsl.v6i2.512

Hasbunallah, H., Muhith, A., & Usriyah, L. (2023). Studying the Kitab of Nashoihul Ibad in Improving the Practice of Prayer in Islamic Boarding Schools. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, *4*(4), 964–972. https://doi.org/10.31538/munaddhomah.v4i4.563

Hasibuan, R., Iqbal, Z. N., Hasibuan, N. A., & Amiruddin, A. (2024). Manajemen Pesantren Modern di Tengah Tantangan Pendidikan: Sebuah Studi Pustaka. *Indonesian Research Journal on Education*, *4*(2), 227–232. https://doi.org/10.31004/irje.v4i2.542

Huda, V. S., Kholifa, A. K., & Pratama, M. R. (2025). Integrasi Pendidikan Islam Dan Sain Dalam Dunia Pasantern Di Era 4.0. *Arsy*, *9*(2), 135–149. https://doi.org/10.32492/arsy.v9i2.9205

Humaida, H., Wati, I. K., Mukmin, M., & Kausar, S. (2026). Digitalizing Islamic Education: Developing a Methodological Model for Generation Z Learners. *Attaqwa: Jurnal Ilmu Pendidikan Islam*, *22*(1), 75–95. https://doi.org/10.54069/attaqwa.v22i1.1044

Hussain, S. (2025). Islamic Education in Contemporary Central Asia: Reviewing Ideas, Curriculum and Pedagogy. *Dirasah International Journal of Islamic Studies*, *3*(1), 64–76. https://doi.org/10.59373/drs.v3i1.47

Ismawati, I. (2023). Nilai-Nilai Pendidikan Karakter Dalam Novel Sang Juara Karya Al Kadri Johan dan Implikasinya Terhadap Pembelajaran Bahasa Indonesia Pada Siswa. *Attaqwa: Jurnal Ilmu Pendidikan Islam*, *19*(2), 278–289. https://doi.org/10.54069/attaqwa.v19i2.633

Isnaeni, F., Budiman, S. A., Nurjaya, N., & Mukhlisin, M. (2025). Analysis of the Readiness for Implementing Deep Learning Curriculum in Madrasah from the Perspective of Educators. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, *8*(1), 15–30. https://doi.org/10.54069/attadrib.v8i1.841

Jubba, H., Pabbajah, M., Abdullah, I., & Juhansar, J. (2022). Reorienting Moral Education for Millennial Muslims: The Changing Role of Islamic Boarding Schools in Indonesia. *The Islamic Quarterly*, *65*, 424.

Junaidi, J., Nazir, M., & Alpizar, A. (2024). Konsep Integrasi Sains dan Islam dalam Pendidikan. *Jurnal An-Nur*, *13*(2), 92. https://doi.org/10.24014/an-nur.v13i2.35126

Kao, Y.-F., Chen, H.-C., & Lo, J.-H. (2023). Exploring an Interdisciplinary Curriculum in Product and Media Design Education: Knowledge Innovation and Competency Development. *Sustainability*, *15*(23), 16369. https://doi.org/10.3390/su152316369

Kosasih, F., Azmi, F., Jaili, H. B. H., & Mirza, I. (2026). Curriculum Evaluation as an Internal Quality Assurance at Islamic Educational Institutions. *International Journal of Social Learning (IJSL)*, *6*(3), 746–756. https://doi.org/10.47134/ijsl.v6i3.606

Lase, D. (2019). Pendidikan di Era Revolusi Industri 4.0. *SUNDERMANN: Jurnal Ilmiah Teologi, Pendidikan, Sains, Humaniora Dan Kebudayaan*, *12*(2), 28–43. https://doi.org/10.36588/sundermann.v1i1.18

Maarif, M. A., Lenda, S. S., Rofiq, M. H., Ismawati, I., & Ardianto, A. (2025). Optimalisasi Pembelajaran Akidah Akhlak melalui Media Quizizz untuk Meningkatkan Prestasi Belajar Siswa. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, *8*(1), 1–14. https://doi.org/10.54069/attadrib.v8i1.836

Maisura, M., Dewi, S. V., Ridwan, R., Sofyan, Z., Kasturi, C. Y., & Rantika, F. (2026). Industry Competency Needs Analysis for Outcome-Based Education (OBE) Curriculum Development. *Jurnal Nispatti*, *11*(1), 23–40. https://doi.org/10.26811/nispatti.v11i1.227

Matos, B. (2025). Epistemology and Religiosity in Plato's Theaetetus: Socrates, the Daimonion, and the Moral Horizon of the Divine. *Religious: Jurnal Studi Agama-Agama Dan Lintas Budaya*, *9*(2), 167–184. https://doi.org/10.15575/rjsalb.v9i2.40548

Miftahuddin, Aman, & Yuliantri, R. D. A. (2024). Islamic character education model: An in-depth analysis for Islamic boarding school. *Cakrawala Pendidikan*, *43*(2), 370–380. https://doi.org/10.21831/cp.v43i2.66516

Miles, B. M., & Huberman, M. (1992). *Analisis Data Kualitatif Buku Sumber Tentang Metode-metode Baru*. UIP.

Mubarok, I., & Nadhir, M. (2025). The Hybridization of Islamic Education Management in the Integration of a Collaborative-Based Pesantren Curriculum. *Dirasah International Journal of Islamic Studies*, *3*(2), 207–221. https://doi.org/10.59373/drs.v3i2.95

Nabila, N. (2021). Tujuan Pendidikan Islam. *Jurnal Pendidikan Indonesia*, *2*(5), 867–875. https://doi.org/10.36418/japendi.v2i5.170

Nasution, I. W., Wahyuni, S., Ritonga, N., Yennizar.N, Yennizar. N., & Latif, M. (2025). Pengembangan Kurikulum Pendidikan Islam Dalam Perencanaan Dan Implementasi Kurikulum Pendidikan. *RIGGS: Journal of Artificial Intelligence and Digital Business*, *4*(2), 2476–2482. https://doi.org/10.31004/riggs.v4i2.866

Niswah, C., Sholihin, M., Zasvenda, M. Y., Amirullah, E., & Dani, A. (2025). Analisis Peran Lembaga Pendidikan Pesantren Dalam Membagun Karakter dan Ilmu Pengetahuan. *Jurnal Ilmiah Multidisipin*, *3*(6), 308–316. https://doi.org/10.60126/jim.v3i6.984

Nurdiniah, S. (2024). Langkah-langkah Partisipasi Guru dalam Pendekatan Pembelajaran Aktif di Muslimeen Suksa School, Thailand. *Karimah Tauhid*, *3*(8), 8581–8598. https://doi.org/10.30997/karimahtauhid.v3i8.14890

Permadi, B. A., Sain, Z. H., Thelma, C. C., & Alai, A. (2025). Development of Comic-based Akidah Akhlak Teaching Materials on Praiseworthy Morals in Madrasah Ibtidaiyah. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, *8*(2), 384–396. https://doi.org/10.54069/attadrib.v8i2.868

Sarbini, S., Suhendi, S., Santora, P., Nurhayati, F., Rosulina, D., Muttaqien, Q. H., & Astuti, H. (2025). Internalizasi Akhlak Islam melalui Pendekatan Psikologi dalam Pembelajaran: Internalizing Islamic Morals through a Psychological Approach in Learning. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, *8*(3), 668–678. https://doi.org/10.54069/attadrib.v8i3.1034

Satiadharmanto, D. F., & Rahman, Z. Abd. (2024). Transformasi Literasi Dalam Pesantren; Perspektif Pemikiran Islam Di Pesantren Al Mu'min Muhammadiyah Tembarak Temanggung. *Jurnal IHSAN Jurnal Pendidikan Islam*, *2*(2), 190–212. https://doi.org/10.61104/ihsan.v2i2.172

Tanjung, Z., Anaswan, A., & Nisak, S. K. (2023). Peran guru akidah akhlak dalam menumbuhkan kecerdasan spritual siswa di madrasah tsanawiyah al-Irsyad kelurahan kampung laut

kecamatan kuala Jambi kabupaten Tanjung Jabung Timur. *Attaqwa: Jurnal Ilmu Pendidikan Islam*, *19*(2), 259–267. https://doi.org/10.54069/attaqwa.v19i2.323

Triyono, B., & Mediawati, E. (2023). Transformasi Nilai-Nilai Islam melalui Pendidikan Pesantren: Implementasi dalam Pembentukan Karakter Santri. *Journal of International Multidisciplinary Research*, *1*(1), 147–158. https://doi.org/10.62504/jimr403

Wandawari, A., Ansar, A., Ningsih, D. A., Arismunandar, A., & Pratiwi, R. (2025). Implementasi Kurikulum Pengetahuan Agama Dan Pengetahuan Umum di Pondok Pesantren Modern Ulul Albab Makassar. *Sanskara Pendidikan Dan Pengajaran*, *3*(01), 32–40. https://doi.org/10.58812/spp.v3i01.489

Wanida, A., & Anwar, A. (2024). Integrasi Ilmu Agama dengan Ilmu Pengetahuan Umum (Islamisasi Ilmu). *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, *7*(3), 2392–2397. https://doi.org/10.54371/jiip.v7i3.3676

Wardatushobariah, N., Sopidi, S., & Syibromilisi, S. (2025). Manajemen kurikulum pesantren:Integrasi Antara Kurikulum Salafiyah, Gontor dan Umum (Penelitian Di Pondok Pesantren Riyadlul 'Ulum Wadda'wah). *TSAQAFATUNA : Jurnal Ilmu Pendidikan Islam*, *7*(1). https://doi.org/10.54213/tsaqafatuna.v7i1.601

Wibowo, G. A., & Saliman, S. (2025). Gamification in Online Learning: A Systematic Review of Engagement and Learning Outcomes in Digital Education. *Online Learning In Educational Research (OLER)*, *5*(2), 351–367. https://doi.org/10.58524/oler.v5i2.733

Widiyanto, Setyawan, H., Suharjana, García-Jiménez, J. V., Pavlovic, R., Nowak, A. M., & Shahri, M. I. B. (2024). The differences in learning outcomes in students' archery skills according to physiological ability. *Cakrawala Pendidikan*, *43*(2), 305–313. https://doi.org/10.21831/cp.v43i2.63268

Wildan, G. S., & Bunyamin, B. (2025). Pemanfaatan Media Pembelajaran Interaktif Untuk Meningkatkan Pemahaman Konsep Keislaman Dalam Pendidikan Agama Islam. *Jurnal Bilqolam Pendidikan Islam*, *6*(1), 117–132. https://doi.org/10.51672/jbpi.v6i1.582

Yanti, F., Wijaya, T., & Sholeh, M. (2024). The Impact of Smartphone Addiction on Learning Outcomes Between Male and Female University Students. *Jurnal Ilmiah Peuradeun*, *12*(1), 99–116. https://doi.org/10.26811/peuradeun.v12i1.1040

Yusri, D. (2020). Pesantren dan Kitab Kuning. *Al-Ikhtibar: Jurnal Ilmu Pendidikan*, *6*(2), 647–654. https://doi.org/10.32505/ikhtibar.v6i2.605

Zahwa, A., Safitri, R. D., Pratiwi, A. N. R., & Subiakto, V. S. N. (2025). Meningkatkan Daya Saing Bangsa: Peran Strategis Investasi Pendidikan dalam Pengembangan SDM. *Indonesian Journal Of Education*, *2*(1), 150–155. https://doi.org/10.71417/ije.v2i1.392