

Strategies for Developing Islamic Religious Education Teachers' Competence in Responding to Digital Learning Challenges at SDN 014613 Panca Arga Asahan

Rahimah Desri Hasibuan, Mhd. Habibu Rahman, Bahtiar Siregar

Abstract

This study aims to analyze strategies for developing the competence of Islamic Religious Education teachers in responding to digital learning challenges at SDN 014613 Panca Arga Asahan. The development of digital technology requires Islamic Religious Education teachers not only to master religious subject matter, but also to design learning that is creative, interactive, contextual, and appropriate to the characteristics of elementary school students. This study employed a descriptive qualitative approach with a field study design. Data were collected through observation, interviews, and documentation involving teachers, the principal, and students as supporting informants. Data analysis was conducted through the stages of data reduction, data presentation, and conclusion drawing, while data validity was strengthened through source and technique triangulation. The results show that the development of Islamic Religious Education teachers' competence is carried out through the improvement of digital pedagogical competence, the strengthening of professional competence, the use of digital learning media, independent learning, training, teacher discussions, the utilization of the Merdeka Mengajar Platform, and principal supervision. The challenges encountered include limited supporting facilities, internet access, differences in teachers' ability to use technology, and the need to supervise students' use of digital media. This study concludes that teacher competence development strategies need to be implemented in a directed, sustainable, and collaborative manner so that learning becomes more engaging, meaningful, and relevant to students' needs in the digital era without neglecting the main goal of Islamic Religious Education, namely shaping students who are faithful, noble in character, polite, and responsible.

Keywords: *Teacher Competence, Digital Learning, Islamic Religious Education*

Rahimah Desri Hasibuan¹

¹Islamic Religious Education, Universitas Pembangunan Panca Budi, Indonesia
e-mail: rahimahdesri2@gmail.com¹

Mhd. Habibu Rahman², Bahtiar Siregar³

^{2,3}Islamic Religious Education, Universitas Pembangunan Panca Budi, Indonesia
e-mail: mhdhabiburahman@dosen.pancabudi.ac.id², bahtiaresiregar@dosen.pancabudi.ac.id³

2nd International Conference on Islamic Community Studies (ICICS)

Theme: History of Malay Civilisation and Islamic Human Capacity and Halal Hub in the Globalization Era

<https://proceeding.pancabudi.ac.id/index.php/ICIE/index>

Introduction

The development of digital technology has changed the direction of learning in elementary schools. Learning no longer relies solely on textbooks and lecture-based methods, but has begun to shift toward the use of digital media, learning videos, interactive applications, learning platforms, online assessments, and internet-based information sources. These changes require teachers to possess new abilities in designing learning that is not only accurate in terms of content, but also engaging, contextual, and suited to the characteristics of today's students. In this context, Islamic Religious Education teachers are not only required to master religious material, but also need digital pedagogical competence so that they can deliver Islamic values through relevant learning media and strategies.

The urgency of developing teachers' digital competence becomes even stronger when viewed from the increasing use of the internet in Indonesia. Statistics Indonesia reported that, based on the 2024 National Socio-Economic Survey, 72.78% of Indonesia's population accessed the internet in 2024, an increase from 69.21% in 2023 (Badan Pusat Statistik, 2023). Statistics Indonesia also recorded that 68.65% of Indonesia's population owned a cellular phone in 2024. These data indicate that digital technology has become an important part of people's lives and, indirectly, has shaped students' learning habits, including those of elementary school students.

However, increased access to the internet does not automatically guarantee improved learning quality. Technology can become an effective learning tool if teachers are able to manage it pedagogically. Conversely, technology can become a distraction if it is used merely for entertainment without clear learning objectives. Therefore, digital learning requires teachers who are able to select media, prepare materials, guide the use of technology, and ensure that learning remains oriented toward competency achievement and student character formation (Hidayat & Nurdin, 2023).

In Islamic Religious Education, this need becomes even more important because the subject of Islamic Religious Education and Character Education does not only aim to deliver religious knowledge, but also to shape morality, spiritual attitudes, social behavior, and students' ability to apply Islamic values in everyday life. The Learning Outcomes of Islamic Religious Education and Character Education in the Merdeka Curriculum emphasize that this subject serves as a guide for students in practicing Islamic teachings and applying noble character (Bahtiar Siregar & Agustia, 2025). Its scope includes human relationships with Allah, with fellow human beings, and with the natural environment.

In addition, the Learning Outcomes of Islamic Religious Education also emphasize the importance of students becoming individuals who are faithful, pious, noble in character, able to apply Islamic principles in thinking, and able to reason critically in understanding differences so that they behave in a moderate, or *wasathiyah*, manner. This indicates that learning in elementary schools must be directed toward strengthening correct religious understanding, moderate attitudes, and good social morals. Thus, the competence of Islamic Religious Education teachers in the digital era is not only related to the ability to use applications, but also to the ability to preserve the substance of Islamic values in the digital learning process.

The challenges of digital learning are becoming increasingly complex with the emergence of artificial intelligence. (UNESCO, 2023) explains that AI has transformed the traditional relationship between teachers and students into a new relationship involving teachers, AI, and students. Therefore, teachers need knowledge, skills, and values to use technology responsibly. Through the AI Competency Framework for Teachers, UNESCO formulates five dimensions of teacher competence in the AI era, namely a human-centered mindset, AI ethics, AI foundations and applications, AI pedagogy, and AI for professional development.

In the context of Islamic Religious Education teachers, these developments require a more directed strategy for competence development. Islamic Religious Education teachers need to understand how to use technology to prepare learning media, find valid learning sources, create simple assessments, manage classrooms, and guide students so that they do not indiscriminately accept religious information from the internet. study by (Bayhaqi et al., 2024) shows that the

competence of Islamic Religious Education teachers in the Merdeka Curriculum in the digital era is important because students can now obtain information from various media and learning sources. The study also emphasizes that teachers need to optimize the use of digital media, social media, and search engines to support Islamic Religious Education learning.

At the elementary school level, the challenges faced by Islamic Religious Education teachers are more specific because students are still in the stage of forming basic knowledge, attitudes, and habits. They need learning that is concrete, visual, enjoyable, and close to everyday experiences. Islamic Religious Education learning that is too verbal and monotonous may make it difficult for students to fully understand the meaning of religious values (Mauzifa & Rahman, 2025). Conversely, the proper use of digital media can help teachers explain exemplary stories, worship practices, daily morals, and Islamic values in ways that are easier for children to understand.

Research on Islamic Religious Education teacher education in elementary schools in the digital era shows that Islamic Religious Education teachers face several main challenges, namely a lack of digital literacy, limited access to technology, and digital disparities between regions (Faruqi, 2025). However, the digital era also opens opportunities through the use of interactive learning media, the development of technology-based learning resources, and collaboration among teachers through digital platforms. The study recommends the need for continuous training for Islamic Religious Education teachers and the provision of adequate technology infrastructure. Other research on technology-based Islamic Religious Education learning innovation in elementary schools confirms that technology can increase learning interest, accelerate conceptual understanding, and help students apply religious values in everyday life (Suharyanto, 2019). However, the study also shows that limited facilities, teacher readiness, and supervision of device use remain important challenges. Thus, the success of digital learning in Islamic Religious Education depends heavily on teacher competence and school support.

The local context of SDN 014613 Panca Arga Asahan is important to examine because this school is a public elementary education unit located in Panca Arga I, Panca Arga Village, Rawang Panca Arga District, Asahan Regency, North Sumatra Province. The Education Data Reference of the Ministry of Primary and Secondary Education records the name of this educational unit as UPTD SDN 014613 Panca Arga with NPSN 10203883, public status, elementary school form of education, and basic education level. The same data also records that the school has B accreditation and a land area of 6,561 m².

Interestingly, the administrative data on the Education Data Reference page of the Ministry of Primary and Secondary Education also records the school's infrastructure section with internet access marked as '-' and the electricity source marked as 'None'. This information needs to be verified through field research because school administrative data may change or may not yet have been updated. Nevertheless, this information can serve as an initial indication that a study on strategies for developing Islamic Religious Education teachers' competence in digital learning at SDN 014613 Panca Arga Asahan is important, especially to observe how teachers respond to digital challenges under conditions of facilities that need to be empirically confirmed.

In addition to school data, the context of Asahan Regency is also relevant because Statistics Indonesia of Asahan Regency provides basic education data, including the number of educational units, principals, educators, and elementary school students by district for the 2025/2026 academic year. The availability of regional education data indicates that studies on teachers and learning in elementary schools need to pay attention to local conditions, including the distribution of schools, educators, students, and the readiness of educational units in facing digital transformation.

Based on the above explanation, strategies for developing the competence of Islamic Religious Education teachers at SDN 014613 Panca Arga Asahan need to be directed toward several aspects. First, strengthening the digital literacy of Islamic Religious Education teachers

so that they can use technology appropriately in learning. Second, strengthening digital pedagogical competence so that teachers can design Islamic Religious Education learning that is active, interactive, and appropriate to the characteristics of elementary school students. Third, strengthening the ability to select valid digital religious sources so that learning is not influenced by unsuitable content. Fourth, strengthening school collaboration through training, learning communities, principal supervision, and support for digital learning facilities.

Therefore, this study is important to conduct in order to analyze strategies for developing Islamic Religious Education teachers' competence in responding to digital learning challenges at SDN 014613 Panca Arga Asahan. This study is expected to provide practical contributions for Islamic Religious Education teachers in improving the quality of digital-based learning, as well as input for schools in designing teacher competence development programs that are aligned with local needs, technological development, and the objectives of Islamic Religious Education in elementary schools.

Literature Review 1. Islamic Religious Education Teacher Competence

Teacher competence is a set of abilities that educators must possess in order to carry out learning tasks professionally. Under Law Number 14 of 2005 concerning Teachers and Lecturers, teacher competence includes pedagogical, personal, social, and professional competence. These four competencies serve as the foundation for teachers in designing learning, mastering subject matter, building good social relationships, and demonstrating a personality that can serve as an example for students (Direktur Jenderal Guru dan Tenaga Kependidikan, 2023).

The competence of Islamic Religious Education teachers can be understood as the ability of teachers to master Islamic subject matter, manage learning, guide the formation of character, and adjust learning strategies to students' development. In the digital era, this competence needs to be expanded to include the ability to use technology as a learning medium. (Bayhaqi et al., 2024) emphasize that the competence of Islamic Religious Education teachers in the Merdeka Curriculum in the digital era is important because students obtain information from various media; therefore, teachers need to be able to use digital media, social media, and search engines appropriately to support Islamic Religious Education learning.

Based on the above explanation, the competence of Islamic Religious Education teachers in this study includes pedagogical, professional, social, personal, and digital abilities. Pedagogical competence relates to the ability to design and implement Islamic Religious Education learning (Fatkhurrokhim, 2024). Professional competence relates to mastery of Islamic religious subject matter. Social competence relates to the ability to communicate with students, parents, and the school environment. Personal competence relates to the teacher's moral example. Meanwhile, digital competence relates to the ability to use technology to strengthen Islamic Religious Education learning effectively, ethically, and in accordance with students' age.

2. Digital Learning in Islamic Religious Education

Digital learning is a learning process that utilizes digital technology to support material delivery, learning interaction, media use, assessment, and the development of learning resources. In Islamic Religious Education learning, digital technology can be used to clarify religious material through learning videos, interactive presentations, digital quizzes, educational applications, animations, visual media, and online learning resources. DigCompEdu explains that educators' digital competence is not only related to technical skills in using devices, but also includes the use of technology for professional communication, digital resource management, learning, assessment, student empowerment, and the development of students' digital competence.

In the context of Islamic Religious Education in elementary schools, digital learning needs to be adapted to the characteristics of students who are still at the concrete developmental stage.

Elementary school students understand material more easily through examples, stories, pictures, videos, direct practice, and enjoyable activities. (Ahmad Ariffudin Ardiansyah, 2025) study shows that technology-based Islamic Religious Education learning innovation in elementary schools can be implemented through interactive multimedia, learning videos, applications such as Kahoot, Wordwall, and Quizizz, Learning Management Systems, gamification, blended learning, and digital projects.

However, digital learning in Islamic Religious Education also presents challenges. Not all teachers have the same level of digital literacy readiness, not all schools have adequate facilities, and not all digital religious sources align with the principles of moderate and childfriendly Islamic education. Research on Islamic Religious Education teacher education in elementary schools states that the challenges faced by Islamic Religious Education teachers in the digital era include a lack of digital literacy, limited access to technological devices, and gaps in technological ability between teachers and students.

3. Strategies for Developing Islamic Religious Education Teachers' Competence in Digital Learning

Strategies for developing Islamic Religious Education teachers' competence refer to planned efforts to improve teachers' abilities so that they can meet the demands of digital learning. These strategies need to be implemented continuously because educational technology continues to evolve. The development of Islamic Religious Education teachers' competence cannot be limited to one-time training; it must include the habit of independent learning, practice in using digital media, learning reflection, teacher collaboration, academic supervision, and school support (Ilham Fatoni, Agus Pahrudin, Agus Jatmiko, 2024).

One strategy that can be implemented is the use of teacher professional development platforms. The Merdeka Mengajar Platform is provided to help teachers teach according to students' abilities, provide training to improve competence, and offer space for teachers to create and inspire their peers. In the context of Islamic Religious Education teachers, this platform can be used to participate in independent training, find teaching tools, watch inspirational videos, and develop good learning practices.

The next strategy is strengthening digital pedagogical competence. Islamic Religious Education teachers need to be trained to formulate learning objectives, select digital media, create interactive teaching materials, use digital assessments, and develop active and enjoyable learning. This is in line with the direction of educational process standards, which position learning as a process that must be designed effectively and remain relevant to developments in science, technology, and social dynamics.

Competence development can also be carried out through teacher learning communities. Through learning communities, Islamic Religious Education teachers can discuss, share teaching tools, evaluate learning obstacles, and try new digital media together. This strategy is important because teachers often face practical constraints, such as limited devices, weak internet networks, limited experience in using applications, or confusion in selecting appropriate learning resources. (Musbaing, 2024) study shows that Islamic Religious Education teachers face challenges such as limited digital literacy, resistance to changes in teaching methods, and insufficient technology training, but also have opportunities to improve competence through technology integration, digital platforms, and access to global learning resources.

Research Methodology

This study used a descriptive qualitative approach with a field study design. This approach was selected because the study aimed to describe in depth the strategies for developing Islamic Religious Education teachers' competence in responding to digital learning challenges at SDN 014613 Panca Arga Asahan. The research subjects included Islamic Religious Education teachers, the principal, and several students as supporting informants. Data were collected through observation, interviews, and documentation to obtain information regarding Islamic

Religious Education teachers' competence, the use of digital media, digital learning constraints, and school strategies in supporting teacher competence development.

Data analysis techniques were carried out through the stages of data reduction, data presentation, and conclusion drawing. Data obtained from observations, interviews, and documentation were analyzed by selecting relevant information, grouping it according to the research focus, and then arranging it systematically to identify patterns in strategies for developing Islamic Religious Education teachers' competence. Data validity was ensured through source and technique triangulation, namely by comparing data from teachers, the principal, students, and supporting documents. Through this method, the study was expected to provide an objective description of strategies for developing Islamic Religious Education teachers' competence in facing digital learning challenges at SDN 014613 Panca Arga Asahan.

Results

Based on the results of observation, interviews, and documentation, strategies for developing Islamic Religious Education teachers' competence in responding to digital learning challenges at SDN 014613 Panca Arga Asahan show that Islamic Religious Education teachers have developed awareness of the importance of using technology in learning. Teachers no longer view digital learning merely as a supplement, but as a necessity for adjusting the learning process to the characteristics of students who are increasingly familiar with digital media. The use of technology in Islamic Religious Education learning has begun through learning videos, visual images, simple presentations, interactive quizzes, and searches for learning resources through the internet.

The first finding shows that Islamic Religious Education teachers' pedagogical competence in digital learning is still at the development stage. Teachers are able to design learning in accordance with the objectives of Islamic Religious Education materials, but the use of digital media has not been fully integrated into all stages of learning. In some materials, such as stories of the prophets, commendable morals, prayer procedures, and memorization of daily prayers, teachers find it easier to use digital media because the material can be visualized through pictures or videos. However, for conceptual materials, teachers still tend to use lecture, question-and-answer, and written assignment methods.

The second finding shows that the professional competence of Islamic Religious Education teachers is reflected in their mastery of teaching materials and ability to explain Islamic values to students. Teachers are able to connect Islamic Religious Education material with everyday life, such as the importance of honesty, discipline, respect for parents, maintaining cleanliness, and appreciating friends. However, in the context of digital learning, teachers still need to improve their ability to select digital sources that are valid, appropriate to students' age, and aligned with the values of Islamic Religious Education. This is important because not all religious content on the internet is suitable for use as teaching material for elementary school students.

The third finding shows that the social and personal competencies of Islamic Religious Education teachers are important factors in the success of digital learning. Islamic Religious Education teachers do not only function as material deliverers, but also as role models in using technology politely, wisely, and responsibly. In learning, teachers try to guide students so that they do not use gadgets only for playing, but also for learning. Teachers also emphasize the importance of etiquette in using technology, such as not mocking friends on social media, not spreading unverified information, and not watching content that is inappropriate for children's age.

The fourth finding shows several challenges in the implementation of digital learning. These challenges include limited supporting facilities, differences in teachers' ability to use technology, limited internet access, and students' low self-control in using digital media independently. In addition, teachers also face challenges in adapting digital media to the

characteristics of elementary school students, who are easily attracted to visual displays but also easily lose focus if learning is not managed properly.

The fifth finding shows that strategies for developing Islamic Religious Education teachers' competence are carried out through several methods, namely independent learning, participation in training, use of the Merdeka Mengajar Platform, discussions with fellow teachers, searching for digital teaching materials, and adapting learning media to students' needs. The principal also plays a role in encouraging teachers to improve their competence through supervision, guidance, and support for the use of learning media. Thus, the development of Islamic Religious Education teachers' competence does not depend solely on individual teacher ability, but also requires ongoing school support.

The results show that developing the competence of Islamic Religious Education teachers in digital learning is an important need at SDN 014613 Panca Arga Asahan. This is in line with changes in students' learning patterns, which are increasingly familiar with technology. Elementary school students today are more easily attracted to learning media that are visual, interactive, and concrete. Therefore, Islamic Religious Education teachers need to develop learning that is not only centered on lectures, but also utilizes digital media to clarify material and increase student engagement.

Digital pedagogical competence is the main aspect that needs to be developed. Islamic Religious Education teachers need to be able to design learning by integrating technology from the planning stage to implementation and evaluation (Whyte, 2022). The use of videos, images, digital quizzes, and interactive media can help students understand material in a more engaging way. For example, material on prayer practice can be strengthened through videos of correct prayer movements; moral education material can be delivered through animated stories; and memorization materials can be supported by audio or short videos. Thus, technology functions as a tool to clarify learning messages, not merely as a teaching variation.

In addition to pedagogical competence, the professional competence of Islamic Religious Education teachers also needs to be developed in the digital context. Islamic Religious Education teachers must be able to ensure that the digital learning resources used are correct, in accordance with Islamic teachings, and suitable for elementary school students. This is important because the internet provides abundant religious information, but not all of it aligns with the principles of moderate, child-friendly, and educational Islamic education. Islamic Religious Education teachers need digital literacy skills to filter content, avoid material that is too complex, and select sources that match learning objectives (Dava Arya Saputra, 2026).

The personal and social competencies of Islamic Religious Education teachers also play an important role. Digital learning does not only require technical ability, but also exemplary conduct in using technology. Teachers need to demonstrate wise, polite, and responsible attitudes in utilizing digital media. This is important because elementary school students are still in a stage where they imitate adult behavior. If teachers are able to use technology positively, students will more easily understand that technology can be used for learning, worship, seeking knowledge, and strengthening character.

The digital learning challenges found in this study show that teacher competence development cannot be carried out instantly. Limited facilities, internet access, and technological ability require gradual and realistic strategies. Islamic Religious Education teachers do not have to immediately use complex technology, but can start with simple media that are easy to apply, such as pictures, short videos, presentations, manual quizzes displayed digitally, or teaching materials downloaded from trusted sources (Kementerian Agama Republik Indonesia, 2024). These simple strategies can still improve learning quality if used with clear objectives.

Strategies for developing Islamic Religious Education teachers' competence at SDN 014613 Panca Arga Asahan can be directed toward several steps. First, teachers need to improve digital literacy through training and independent learning. Second, teachers need to develop learning media that are appropriate to the material and students' age. Third, schools need to

encourage the formation of teacher learning communities so that teachers can share experiences and teaching materials. Fourth, principals need to conduct supervision that does not only assess learning administration but also assists teachers in improving the quality of digital learning. Fifth, Islamic Religious Education teachers need to strengthen students' digital ethics so that the use of technology remains aligned with religious values and character.

This discussion shows that strategies for developing Islamic Religious Education teachers' competence must be carried out comprehensively. Competence development should not focus only on the ability to use technological devices, but should also include pedagogical ability, subject mastery, exemplary conduct, communication, and digital religious literacy (Sulastri A, 2024). Through these strategies, Islamic Religious Education teachers can respond to digital learning challenges more appropriately while maintaining the main goal of Islamic Religious Education, namely shaping students who are faithful, noble in character, intelligent, polite, and able to use technology responsibly.

Therefore, the development of Islamic Religious Education teachers' competence at SDN 014613 Panca Arga Asahan needs to be carried out continuously through training, mentoring, teacher collaboration, utilization of digital platforms, and school support. If these strategies are implemented consistently, Islamic Religious Education learning can become more engaging, contextual, and relevant to students' needs in the digital era.

Conclusion

Strategies for developing Islamic Religious Education teachers' competence in responding to digital learning challenges at SDN 014613 Panca Arga Asahan constitute an important need for improving the quality of Islamic Religious Education learning in the digital era. Islamic Religious Education teachers have shown awareness of the importance of utilizing technology in learning, although its implementation still needs to be developed in a more directed, systematic, and sustainable manner. The development of Islamic Religious Education teachers' competence includes several main aspects, namely digital pedagogical competence, professional competence, social competence, and personal competence. Digital pedagogical competence is needed so that teachers can design learning that is engaging, interactive, and appropriate to the characteristics of elementary school students. Professional competence is needed so that teachers can select digital learning sources that are valid and aligned with Islamic values. Meanwhile, social and personal competencies are needed so that teachers can become role models in using technology politely, wisely, and responsibly.

The main challenges in digital learning include limited supporting facilities, internet access, differences in teachers' ability to use technology, and the need to supervise students' use of digital media. Therefore, strategies for developing Islamic Religious Education teachers' competence need to be implemented through training, independent learning, the use of the Merdeka Mengajar Platform, discussions among teachers, the development of simple learning media, principal supervision, and the formation of a collaborative culture within the school environment.

References

- [1] Ahmad Ariffudin Ardiansyah, M. N. A. (2025). Pembelajaran Diferensiasi sebagai Strategi Peningkatan Mutu Pendidikan Agama Islam di Madrasah. *PASIR: Jurnal Pusat Studi Islam Pesisir*, 1(1), 57–69. <https://doi.org/10.58518/pasir.v11.1006> [2]
- Badan Pusat Statistik. (2023). *Statistik Indonesia 2023*. BPS RI.
- [3] Bahtiar Siregar, Mhd. Habibu Rahman, & Agustia, N. R. (2025). Development of an Islamic Religious Education Curriculum Based on Spiritual and Social Competencies at Darussalam Senior High School Medan. *International Conference on Islamic Community Studies (ICICS)*, 870–880.

- [4] Bayhaqi, H. N., Ilham, M., & Badriyah, L. (2024). Kompetensi Guru PAI dalam Kurikulum Merdeka di Era Digital. *PANDAWA*, 6(3), 128–136. <https://doi.org/10.36088/pandawa.v6i3.4957>
- [5] Dava Arya Saputra, R. G. S. (2026). Telaah Implementasi Kurikulum PAI di Madrasah Melalui Kajian Praktis, Pengembangan, Dan Pendekatan Analisis Literatur. *Ar-Ruhul Ilmi Jurnal Pendidikan Dan Pemikiran Islam*, 2(01), 1–13.
- [6] Direktur Jenderal Guru dan Tenaga Kependidikan. (2023). *Peraturan Direktur Jenderal Guru dan Tenaga Kependidikan Nomor 2626/B/HK.04.01/2023 tentang Model Kompetensi Guru*. https://uploads.belajar.id/document/files/Salinan_Pendirjen_2626_Model_Kompetensi_Guru_01hy1pp9e90k2fqqlvk59nm8jy.pdf
- [7] Faruqi, D. (2025). Transformasi Literasi Keagamaan melalui Media Sosial dalam Perspektif Pendidikan Islam Modern. *Jurnal Kepemimpinan Dan Pengurusan Sekolah*, 10(3), 1422–1430.
- [8] Fatkhurrokhim, B. M. R. B. (2024). Teacher Competence from The Perspective of Imam Al-ghazali in The Book “Ayyuhal Walad.” *Saliha: Jurnal Pendidikan Dan Agama Islam*, 7(2). <https://doi.org/10.54396/saliha.v7i2.1246>
- [9] Hidayat, R., & Nurdin, F. (2023). Transformasi Paradigma Pembelajaran PAI: Dari Transmisi Pengetahuan Menuju Pembentukan Karakter Ekologis. *Jurnal Pendidikan Islam*, 9(1), 45–67. <https://doi.org/10.14421/jpi.2023.91.45-67>
- [10] Ilham Fatoni, Agus Pahrudin, Agus Jatmiko, K. (2024). Pengembangan Kurikulum dan Pembelajaran PAI di Sekolah dan Madrasah. *At-Tajdid : Jurnal Pendidikan Dan Pemikiran Islam*, 8(2).
- [11] Kementerian Agama Republik Indonesia. (2024). *Panduan Literasi Keagamaan Digital untuk Lembaga Pendidikan Islam*.
- [12] Mauzifa, I. A., & Rahman, A. M. (2025). Relevansi Profesionalitas, Kebijakan, dan Kompetensi Guru Pendidikan Agama Islam: Sebuah Tinjauan Kritis. *QuranicEdu: Journal of Islamic Education*, 5(10), 112–135.
- [13] Musbaing. (2024). Transformasi Pendidikan Agama Islam di Era Digital: Tantangan dan Peluang bagi Guru PAI. *Refleksi: Jurnal Pendidikan*. <https://p3i.my.id/index.php/refleksi/article/view/369>
- [14] Suharyanto, E. H. P. (2019). Pengembangan Kurikulum Berbasis Pendidikan Karakter (Telaah Pengembangan Inovasi Pembelajaran Pendidikan Agama Islam). *Jurnal Pendidikan Islam*, 8(1), 71–94. <https://doi.org/10.38073/jpi.v8i1.103>
- [15] Sulastri A, Danny Abrianto. (2024). Peningkatan Literasi Digital pada Mata Pelajaran Pendidikan Agama Islam dalam Mendukung Implementasi Kurikulum Merdeka di SMA Islam Al Ulum Terpadu Medan. *Jurnal Bilqolam Pendidikan Islam*, 5(2), 101–114.
- [16] UNESCO. (2023). *Artificial Intelligence in Education: Challenges and Opportunities for Sustainable Development*. <https://doi.org/10.54675/GBAA8943>
- [17] Whyte, S. A. (2022). Islamic Religious Authority in Cyberspace : A Qualitative Study of Muslim Religious Actors in Australia. *Religions*, 13(1), 1–16.