

## Optimizing Artificial Intelligence (AI) as a Learning Media for Islamic Religious Education in the Society Era 5.0

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**Abstract:** This study aims to examine the optimization of artificial intelligence (AI) as a learning medium for Islamic Religious Education (IRE) through the use of the Quizizz AI platform at MTs Sunan Kalijaga Senduro, Lumajang Regency. This research employed a descriptive qualitative approach with a field research design. Data were collected through in-depth interviews, classroom observations, and document analysis involving IRE teachers and students of grades VIII and IX. Data analysis was conducted using the interactive model of Miles and Huberman, which includes data reduction, data display, and conclusion drawing. The findings indicate that the use of Quizizz AI as a formative assessment medium enhances the effectiveness of IRE learning evaluation and increases students' engagement and learning motivation. The platform enables teachers to conduct assessments more efficiently, objectively, and systematically through automated feedback that supports instructional follow-up. However, several challenges were identified, particularly related to teachers' limited digital literacy and the technical constraints of the internet infrastructure. This study concludes that Quizizz AI has significant potential as an adaptive and innovative assessment medium for Islamic Religious Education in the Society 5.0 era, provided that it is supported by continuous teacher training, supportive madrasa policies, and ethical technology use grounded in Islamic values.

**Keywords:** Islamic Religious Education, Artificial Intelligence, Quizizz AI, Learning Media, Society 5.0

*Abstract: Penelitian ini bertujuan untuk mengkaji optimalisasi pemanfaatan kecerdasan buatan (Artificial Intelligence/AI) sebagai media pembelajaran Pendidikan Agama Islam (PAI) melalui penggunaan platform Quizizz AI di MTs Sunan Kalijaga Senduro, Kabupaten Lumajang. Penelitian ini menggunakan pendekatan kualitatif deskriptif dengan desain penelitian lapangan. Data dikumpulkan melalui wawancara mendalam, observasi pembelajaran, dan studi dokumentasi yang melibatkan guru PAI serta siswa kelas VIII dan IX. Analisis data dilakukan menggunakan model interaktif Miles dan Huberman yang meliputi reduksi data, penyajian data, dan penarikan kesimpulan. Hasil penelitian menunjukkan bahwa penggunaan Quizizz AI sebagai media evaluasi formatif mampu meningkatkan efektivitas proses penilaian pembelajaran PAI serta mendorong keterlibatan dan motivasi belajar siswa. Platform ini membantu guru melakukan evaluasi secara lebih efisien, objektif, dan sistematis melalui umpan balik otomatis yang dapat digunakan sebagai dasar tindak lanjut pembelajaran. Namun demikian, penelitian ini juga menemukan beberapa kendala, terutama terkait keterbatasan literasi digital guru dan permasalahan teknis jaringan internet. Penelitian ini menyimpulkan bahwa Quizizz AI memiliki potensi yang signifikan sebagai media evaluasi pembelajaran PAI yang adaptif*

*dan inovatif di era Society 5.0, apabila didukung oleh peningkatan kompetensi guru, kebijakan madrasah yang suportif, serta pemanfaatan teknologi yang berlandaskan etika dan nilai-nilai Islam.*

*Kata kunci: Pendidikan Agama Islam, Kecerdasan Buatan, Quizizz AI, Media Pembelajaran, Society 5.0*

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## **Introduction**

Islamic Religious Education (PAI) is one of the core subjects in the Indonesian national education system, which has a strategic role in shaping students' character, morals, and spiritual awareness (Amalia Dwi Fitriani, 2023; Azizah et al., 2023; Umam & Hasan, 2025). PAI is not only oriented towards mastering religious knowledge, but is also directed at instilling moral values, ethics, and religious attitudes, which are the foundation for forming students' personalities. (Nirvana & Khoiri, 2023) In the context in the development of modern society, PAI learning is required to be able to adapt to the dynamics of the times without abandoning the substance of Islamic values (Caniago et al., 2025).

However, the factual conditions of PAI learning in Indonesia show that the use of learning media and technology is still not optimal. Empirically, the National Assessment results report and the 2022 study by the Ministry of Education, Culture, Research, and Technology indicate that the majority of PAI teachers at the secondary education level still rely on conventional learning methods, such as lectures and the use of textbooks as the main source of learning. (Abdillah & Astutik, 2024). The data show that less than 40% of PAI teachers make continuous use of interactive digital media in the learning process, and that the use of intelligent technologies based on artificial intelligence (AI) is still very limited, especially in the evaluation and personalization aspects of learning. (Hidayat et al., 2024) The empirical findings are in line with the research results (Uy, 2025) which concludes that the integration of information technology in PAI learning is still at an early stage and has not touched on the pedagogical use of technology to support adaptive and learner-centered learning.

PAI learning tends to be one-way, making it less able to accommodate differences in students' abilities, interests and learning styles. This condition shows the gap between the ideal learning demands in the digital era and the reality of PAI learning practices in schools. (Styana & Sahlan, 2025, 2025) On the other hand, the development of artificial intelligence technology offers a great opportunity to improve the quality of PAI learning. AI technology allows for the personalization of

learning through analysis of learner responses, providing feedback in real time, and presenting more interactive and adaptive learning materials. (Hastuti & Hartono, 2025; Styana & Sahlan, 2025) Utilizing AI in the form of automated evaluation applications, learning recommendation systems, and adaptive quiz platforms can help teachers map students' levels of understanding more accurately and efficiently. (Alisia Zahroatul Baroroh et al., 2024).

Within the framework of Society 5.0, the use of educational technology is not only oriented towards efficiency and technical sophistication, but must also promote human and moral values. (Nurdin Malayu & Ritonga, 2024) Therefore, the use of AI in PAI learning needs to be directed as a medium (*wasilah*) that supports the achievement of Islamic educational goals, not as a substitute for the role of educators. (Yusgiantara & Labib, tt) Teachers still have a central position as guides (*murabbi*) in instilling moral and spiritual values in students. Despite its great potential, AI implementation in PAI learning still faces various challenges. (Harriguna & Wahyuningsih, 2021) Several studies show that the main obstacles include limitations in teachers' digital literacy, a lack of training related to the use of AI in learning, limitations in technological infrastructure in schools, and concerns about the ethical implications of using intelligent technology in religious education.

Apart from that, changes in the characteristics of digital generation students who are more responsive to interactive and technology-based media also require learning innovations that are relevant to current developments. (Pd et al., tt, tt) This broader problem encourages Islamic education units to start adapting to the use of AI-based technology as an effort to maintain the relevance of PAI learning so that it does not lag behind global developments while still being able to achieve learning goals effectively. (Mubarokah et al., 2021) In this context, MTs Sunan Kalijaga Senduro views the use of artificial intelligence technology as a strategic solution to answer the learning challenges of PAI in the digital era. The choice of the Quizizz AI platform is based on considerations of ease of use, interactive evaluation characteristics, and its ability to provide automatic feedback to students. Nevertheless, the use of AI in this school is still at an early stage and has not been supported by the results of comprehensive empirical research on its effectiveness, user perception, and implementation constraints. Therefore, research is needed that specifically examines the practice of utilizing Quizizz AI in PAI learning in order to produce empirical findings that can form the basis for more optimal development of technology-based PAI learning.

Based on this description, this research is field research (field research) with a descriptive qualitative approach implemented at MTs Sunan Kalijaga Senduro, Lumajang Regency, East Java. This research specifically examines the use of artificial intelligence (AI) as a learning medium for Islamic Religious Education using the

Quizizz AI platform as a tool for evaluating and strengthening PAI learning materials.

Thus, this research is directed at deeply examining the use of the Quizizz AI platform as a learning medium for Islamic Religious Education at MTs Sunan Kalijaga Senduro. In particular, this research seeks to reveal what form Quizizz AI implementation takes in the PAI learning process, how teachers and students perceive the effectiveness of using the platform, and what factors are supporting and inhibiting the use of Quizizz AI as a learning medium for PAI in madrasa environments. In line with the formulation of this problem, this research aims to empirically describe the use of Quizizz AI as a learning medium for Islamic Religious Education at MTs Sunan Kalijaga Senduro. In addition, this study aims to analyze the effectiveness of using Quizizz AI in PAI learning based on the perception of teachers and students, and identify the opportunities and challenges faced in implementing Quizizz AI as a learning medium for PAI in these madrasas.

In general, Islamic education aims to guide humans towards a better life, in accordance with nature and divine teachings. (Arifin, tt) So, in the context of the Society 5.0 era, namely an era where advanced technology is integrated with human values, AI needs to be optimized ethically and proportionally to support the vision of Islamic education that is *rahmatan lil' alamin*. (Mohadi & Tarshany, 2023) Based on this background, this research aims to examine the optimization of artificial intelligence (AI) as a learning medium for Islamic Religious Education in the era of Society 5.0. It is hoped that this study will contribute to the development of learning strategies that are innovative, contextual, and in line with Islamic values, as well as strengthen the role of PAI in facing the challenges of the digital age.

### **Methods**

This research uses a descriptive qualitative approach with design field research (field research). (Muhith, tt) The qualitative approach was chosen because this research aims to describe in depth the phenomenon of using artificial intelligence (AI) called Quizizz AI as a tool for evaluating and strengthening PAI learning materials in the Society 5.0 era. The focus of the research was not directed towards quantitative measurement of learning outcomes, but rather towards analysis of implementation practices, user perceptions, and the pedagogical and ethical context of the use of AI in PAI learning. This approach was chosen because it is able to reveal the meaning, understanding, and experience of informants comprehensively and contextually.

Location and research subjects were carried out at MTs Sunan Kalijaga Senduro, Lumajang Regency, East Java Province. This madrasa was chosen as a research location because it has implemented PAI learning based on digital technology by utilizing the Quizizz AI platform as a medium for evaluating and

strengthening learning materials. The subjects in this research include various parties directly involved in the use of artificial intelligence technology in Islamic Religious Education learning at MTs Sunan Kalijaga Senduro. The main subject of the research consisted of two Islamic Religious Education teachers who actively used the Quizizz AI platform in the learning process. In addition, this study involved twelve students in grades VIII and IX who took part in PAI learning using Quizizz AI as a medium for evaluating and strengthening material. To complete and strengthen research data, one deputy head of a madrasa in the curriculum sector is also used as a supporting informant to obtain information related to school policies in the use of digital and AI-based learning technology.

Data collection in this study was carried out through several complementary techniques. In-depth interviews (in-depth interviews) are used to comprehensively explore information from teachers and students regarding experiences, perceptions, challenges, and opportunities for utilizing Quizizz AI in learning Islamic Religious Education. In addition, participatory observation was carried out by directly observing PAI learning activities involving the use of AI technology, both in offline and online learning, so that researchers can understand the actual practice of implementing Quizizz AI in the field. Data collection techniques are also complemented by documentation studies, which include the collection and analysis of learning documents such as syllabi, Learning Implementation Plans (RPPs), as well as AI-based learning media used by teachers in the PAI learning process.

As for Instruments data in research, it's shaped by semi-structured interview guidelines, observation sheets, and document analysis formats. All instruments were designed to answer the focus of the study which has been designed in this research. The data analysis technique in this research uses model interactive thematic analysis as proposed by Miles and Huberman (2014). Data analysis is carried out on an ongoing basis from the data collection stage until the conclusion is drawn. The first stage is data reduction, which is the process of sorting, selecting, and summarizing important data obtained from in-depth interviews, participatory observations, and documentation studies. Data considered relevant to the focus of the study were retained, while unrelated data were set aside to make the analysis more purposeful.

The next stage is the presentation of data, in which the reduced data are systematically organized in the form of descriptive narratives, thematic tables, and concept maps. Presentation data aims to make it easier for researchers to understand patterns, relationships between findings, and trends that arise from the use of Quizizz AI in learning Islamic Religious Education. The structured presentation of data also helps readers in tracing the analysis flow logically and transparently. The final stage is conclusion drawing and verification. At this stage, researchers interpret

the meaning of the data that has been presented to answer the formulation of the research problem. The conclusions obtained are then verified through source and technique triangulation techniques, as well as data double-checking with the main informant (member check) to ensure the validity, consistency, and credibility of the research findings.

To ensure the validity and reliability of the data, it is carried out triangulation techniques are used, namely comparing interview results, observations, and documentation from various informants. (Snyder, 2019) In addition, techniques are used to perform member checks to ensure that the results of the interpretation are in accordance with those intended by the source. The flowchart also describes a systematic flow in descriptive qualitative research entitled "Optimizing Artificial Intelligence (AI) as a Learning Media for Islamic Religious Education in the Society Era 5.0".

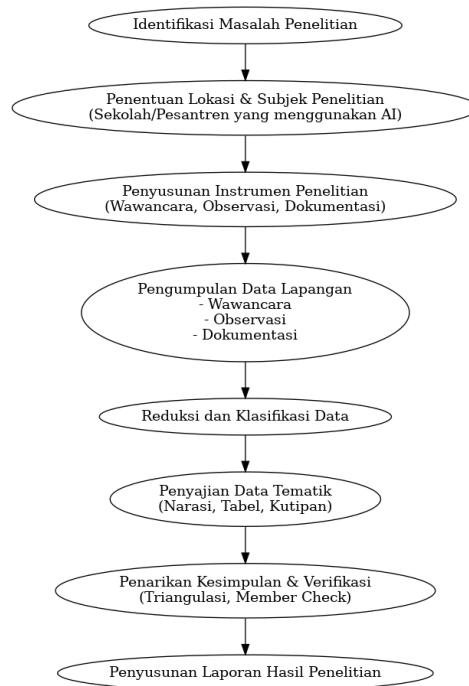


Figure 1 Research Flowchart

Based on the research flow depicted in the flowchart, it can be concluded that this research was structured systematically and focused on an in-depth exploration of the phenomenon of using AI in PAI learning. The stages from problem identification to final reporting show a holistic, purposeful approach and are in accordance with the rules of qualitative research. This process not only aims to describe existing practices, but also provides recommendations development technology-based PAI learning, ethical, and based on Islamic values.

## **Results And Discussion**

### **Results**

The results of this research were obtained through in-depth interviews, learning observations, and documentation studies conducted at MTs Sunan Kalijaga Senduro. Research findings show that learning Islamic Religious Education (PAI) at the madrasa has begun to be directed at the use of digital media in response to developments in educational technology. One form of innovation implemented is the use of the Quizizz AI platform as a medium for evaluating and strengthening PAI materials, which is positioned as an effort to increase the effectiveness of learning without eliminating the characteristics and values of Islamic education.

The results of in-depth interviews with Islamic Religious Education teachers show that the use of Quizizz AI is seen as an innovation that is relevant to current learning needs. A PAI teacher said that the integration of digital media in learning is a form of madrasa adaptation to developments in educational technology.

The teacher stated:

*“Islamic Religious Education learning has now begun to be directed towards the use of digital media as a form of response to developments in educational technology. One of the innovations we implemented was the use of the Quizizz AI platform as a medium for evaluating and strengthening PAI materials. We position the use of this technology to increase the effectiveness of learning, but still maintain the values of Islamic education.”*

The PAI teacher also explained that the use of Quizizz AI is focused on formative evaluation activities, such as daily quizzes and final evaluation of material. This aims to measure students' level of understanding of Islamic creed, jurisprudence, and Cultural History (SKI) material. The teacher revealed:

*“In practice, we use Quizizz AI we use for daily quizzes and final evaluation of materials. From the system, we can immediately see the percentage of student completion, the level of problem difficulty, and learning achievements, both individually and in class.”*

In terms of efficiency, teachers consider that Quizizz AI is very helpful in the learning evaluation process. The use of automated analysis systems is considered capable of reducing the workload of teachers in manual correction and speeding up the preparation of follow-up lessons learned. As stated by one of the teachers:

*“Quizizz AI is very helpful because the evaluation process is faster and there is no need for manual correction. We can also immediately use the results as material to determine the next learning steps.”*

However, the interview results also show that the use of artificial intelligence features in Quizizz AI is not yet completely optimal. The teacher acknowledged that

the limited understanding of advanced analytic features meant that the use of the platform was still limited to the basic functions of evaluation. The teacher said:

*“Actually, there are many features in Quizizz AI, but we are still just using the basics. For more in-depth analysis, we still need to learn more and need training.”*

Interviews with students in grades VIII and IX showed a positive response to the use of Quizizz AI in PAI learning. Students find digital quiz-based evaluations more interesting than conventional evaluations. One of the students said:

*“I like using that application because learning is not boring. If you answer wrongly, there will be an explanation immediately, so you can immediately know where the error lies.”*

Students also assess that the use of Quizizz AI provides learning flexibility and encourages independence in understanding PAI materials. To strengthen the research data obtained, researchers also make direct observations, which are true that the implementation of Quizizz AI is actually carried out in PAI learning activities, especially at the formative evaluation stage. The teacher guides students to access the quiz via their respective devices, while the quiz work process is monitored in real time via the teacher's dashboard. During the activity, students were seen to be more focused and enthusiastic than during conventional written evaluations.

Observations also show that there is active interaction between teachers and students after the quiz. Teachers discuss questions that are answered incorrectly and provide additional explanations as a form of material reinforcement. This condition shows that Quizizz AI not only functions as an evaluation tool, but also as a means of reflection and strengthening understanding of PAI material.

However, in several meetings, technical obstacles were found, such as the stability of the internet network and differences in teachers' digital literacy levels. This obstacle means that the use of Quizizz AI cannot be applied consistently at every learning meeting.



(Figure 2: PAI learning activities using Quizizz AI)

The results of this documentation study reinforce the findings of the interviews and observations. Learning documents such as the syllabus and Learning Implementation Plan (RPP) indicate that the use of digital-based learning media, including Quizizz AI, has been planned as part of the learning evaluation strategy of PAI. Apart from that, documentation in the form of screenshots of Quizizz AI quiz results shows student learning achievement data which is presented automatically and systematically.

Before students use the Quizizz AI application, teachers previously provide direction or training to their students. Because many students don't know how. Madrasas provide space for teachers to develop and utilize technology-based learning media as part of efforts to improve the quality of PAI learning that is adaptive to current developments.



(Figure 3: directions for using Quizizz AI)

Based on the results of in-depth interviews, observations, and documentation conducted at MTs Sunan Kalijaga Senduro overall, the findings of this study show that the use of Quizizz AI in Islamic Religious Education learning at MTs Sunan Kalijaga Senduro makes a positive contribution to the effectiveness of learning evaluation and student learning motivation. However, utilizing this technology still requires strengthening teacher competency and technical support so that the application of AI in PAI learning can run more optimally and sustainably.

### **Discussion**

The integration of artificial intelligence (AI) in Islamic Religious Education (PAI) learning, especially through the Quizizz AI platform, can be understood as part of a pedagogical transformation towards learner-centered learning. (Muchasan et al., 2024) In the context of modern pedagogy, AI allows the formative assessment process to take place adaptively through providing instant feedback, analyzing learning achievements, and supporting independent learning. (Yusof et al., 2024) This is in line with the study of Yusof et al., which shows that analytical data on

Quizizz can be used to improve the quality of evaluation and student involvement in technology-based learning.

From a learning theory point of view, the utilization of Quizizz AI strengthens the constructivist approach constructivistic which places students as active subjects in the learning process. (Dinana et al., 2024) Through interaction with AI-based quiz systems, students are encouraged to reflect on their learning achievements independently. Rachmawati and Nasution emphasized that AI-based platforms such as Quizizz are able to support adaptive learning that suits the needs and characteristics of students in the Society 5.0 era. In the context of Islamic Religious Education, the use of digital technology needs to be placed proportionally as a learning medium (wasilah). (Anas & Hamka, 2025) Technology not only functions as a technical tool, but must also be in harmony with the goals of forming students' values, attitudes, and morals. Research by Said et al. shows that the integration of AI in learning can go hand in hand with strengthening character education if directed pedagogically and ethically. (Said, Jihad, & Rushdi, tt)

The role of teachers in AI-based PAI learning remains a central element that technology cannot replace. (Rismawati, 2024) Teachers function as learning designers, directors of pedagogical processes, as well as moral and spiritual guides for students. This is in line with the view of Rijali et al., who emphasized that the use of AI in education must be under the control of educators so as not to shift the essence of human values and the teacher's role as the main educator.

In addition, ethical aspects and human resource readiness are important factors in the successful integration of AI in religious learning. The Durgungoz and Durgungoz study shows that although AI-generated quizzes are able to increase student engagement, their utilization still requires pedagogical supervision and digital literacy of teachers so as not to degrade the quality of learning substance.

Thus, this discussion confirms that the use of Quizizz AI in PAI learning is a form of adaptation of Islamic education to the development of global education technology. (Fischer et al., 2024) AI integration carried out in a directed, ethical, and based on Islamic values has the potential to improve the quality of PAI learning, without eliminating the teacher's role as a murabbi and the main goal of Islamic education.

The findings of this research show that the use of artificial intelligence (AI) in Islamic Religious Education (PAI) learning, especially through the use of platforms such as Quizizz AI, contributes positively to increasing the effectiveness of evaluation and the involvement of students in the learning process. The use of Quizizz AI as a formative evaluation medium allows the assessment process to take place more interactively, quickly, and responsively to students' learning

achievements, so that PAI learning is no longer limited to conventional, one-way approaches.

From a pedagogical perspective, the utilization of Quizizz AI strengthens the application of a learner-centered learning approach. Students not only act as recipients of information, but are actively involved in the reflection process through instant feedback provided by the system after quiz work. These interactions encourage students to recognize the level of mastery of the material independently and make continuous improvements in learning. In this context, AI technology serves as a learning support vehicle that helps facilitate the knowledge construction process more adaptively.

The role of PAI teachers in Quizizz AI-based learning remains in a central position. Teachers function as learning designers, directors, and guides who ensure that the use of technology is in line with learning goals and Islamic values. AI does not replace the role of teachers, but rather acts as a pedagogical tool that speeds up the assessment process and provides learning data that teachers can use to design more targeted learning follow-ups.

Interpretation of these findings also indicates that the successful integration of AI in PAI learning is strongly influenced by supporting factors, such as digital literacy of teachers, availability of technological infrastructure, and support for educational institutions' policies (Ainiyah et al., 2025; Yusof et al., 2024). Limitations on these aspects have the potential to hinder optimization of AI utilization, although conceptually, this technology has a great opportunity to improve the quality of PAI learning in the digital era.

Thus, the use of Quizizz AI in PAI learning at MTs Sunan Kalijaga Senduro can be understood as the first step in the adaptation of Islamic education to technological developments. AI integration carried out in a directed, proportional, and based on pedagogical and Islamic values has the potential to strengthen effective learning without losing the essence of the role of teachers and the goals of Islamic religious education itself.

Research has several limitations that need to be recognized as part of academic responsibility. First, the scope of this research is limited to one educational unit, namely MTs Sunan Kalijaga Senduro. The focus on one location allows a comprehensive deepening of the context, but on the other hand, limits the generalizability of research findings to other madrasas or schools with different characteristics. Therefore, the results of this study are more accurately understood as contextual images that require further testing at more diverse educational locations and levels.

The next limitation relates to the sources of research data. Data empirical is obtained mainly from interviews with PAI teachers and students directly involved

in Quizizz AI-based learning. Consequently, the resulting viewpoint is still limited to the direct user experience in the classroom and does not fully cover the perspectives of other stakeholders, such as principals, parents of students, or developers or technology platform providers. The involvement of these parties has the potential to enrich analysis regarding policies, institutional support, and technical aspects of utilizing AI in PAI learning.

In addition, limitations are also found in the field observation aspect. Learning observation activities were carried out at several meetings that used Quizizz AI as an evaluation medium, so they were not able to represent variations in the application of AI technology in the long term. This condition means that research has not fully captured the dynamics of sustainable use of AI, including changes in teacher strategies and student adaptation from time to time.

The last limitation relates to the technical aspects of the technology used. The research does not conduct an in-depth exploration of the artificial intelligence systems or algorithms that work behind the Quizizz AI platform. The analysis is more focused on the perception of the users and the effectiveness of their utilization in the context of PAI learning. Therefore, research has not been able to explain in detail the technical mechanisms of AI from a computational point of view, but rather places technology as a pedagogical medium observed from an educational perspective. By recognizing these various limitations, this research is expected to become a foothold early for further research that wants to expand the scope of the location, enrich data sources, extend the duration of observations, and examine the technical aspects of AI in more depth in the context of Islamic Religious Education learning

Theoretically, the findings of this research contribute to the development of modern learning studies in the context of Islamic education, especially regarding the integration of artificial intelligence technology in Islamic Religious Education (PAI) learning. Results show that the utilization of AI, in the form of a Quizizz AI-based evaluation platform, can be understood as strengthening a constructivist learning approach that places learners as active subjects in the learning process. This technological integration also emphasizes that AI-based learning innovation does not conflict with Islamic values if it is directed ethically, pedagogically, and proportionally, and still places teachers at the center of developing values and morals.

On the practical side, this research provides important implications for Islamic teachers and educational units. The use of Quizizz AI in PAI learning shows the need for improving teacher competencies through ongoing training, especially in managing AI-based learning media that is aligned with the PAI curriculum. In addition, the findings of this research encourage the development of AI-based

learning media that not only emphasize the technical aspects and efficiency of evaluation, but also integrate the values of morals, spirituality, and Islamic character in their learning design. School and madrasa policy support is an important factor so that the use of AI technology can be integrated systematically and sustainably in learning practices.

The policy implications of this study demonstrate the important role of governments and Islamic educational institutions in responding to developments in artificial intelligence technology in the field of education. The findings of this research support the urgency of preparing national guidelines related to the use of AI in Islamic religious learning, which include aspects of ethics, data security, student protection, and the readiness of teachers and educational institutions.

### **Conclusion**

This research concludes that the use of artificial intelligence (AI) in Islamic Religious Education (PAI) learning, especially through the use of the Quizizz AI platform, makes a positive contribution to the effectiveness of learning evaluation and student involvement. The use of Quizizz AI as a formative evaluation medium helps teachers to map students' levels of understanding more quickly, objectively, and systematically, while encouraging active student participation in the PAI learning process.

The utilization of Quizizz AI allows for the availability of hands-on learning feedback that helps students recognize the strengths and weaknesses of their understanding of PAI materials. This condition has implications for increasing learning motivation and student involvement in evaluation activities. From the teacher's perspective, this platform is felt to be able to lighten the burden of manual assessment and support more focused learning follow-up planning based on student learning achievement data. Nevertheless, the study also found some obstacles in the implementation of Quizizz AI, especially regarding the limitations of digital literacy of teachers and technical constraints of the internet network infrastructure. These obstacles mean that the use of AI in PAI learning is not yet fully optimal and still requires assistance and strengthening of human resource capacity.

Thus, optimizing the use of AI in PAI learning has enormous potential to be developed, as long as it is supported by continuous teacher training, adaptive school policies, and technology management based on ethical and Islamic values. The integration of Quizizz AI as a learning medium for PAI needs to be understood not just as a technological innovation, but as part of efforts to maintain the relevance of Islamic education in the era of Society 5.0, without eliminating the essence of moral development, spirituality, and the central role of teachers as educators.

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