# INNOVATIONS IN ISLAMIC RELIGIOUS EDUCATION TEACHING METHODS IN THE DIGITAL ERA

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#### **Abstract**

this study investigates the impact of digital innovation on the teaching of Islamic Education (PAI), highlighting how technology enhances learning outcomes and engagement. The research focuses on the integration of interactive learning applications, e-learning platforms, social media, and educational software into PAI instruction. The primary objective is to evaluate how these technological tools affect student understanding, motivation, and accessibility to learning materials. Using a mixed-methods approach, including surveys and interviews with teachers and students, the study reveals that digital tools make PAI more engaging and relevant. Students appreciate the flexibility of e-learning platforms, which allow for personalized learning experiences. However, challenges such as technology access disparities between urban and rural areas, as well as the need for ongoing teacher training, are identified. The findings suggest that while digital innovations have positive effects on PAI, addressing access issues and enhancing teacher competency are crucial for maximizing their benefits. This study underscores the need for continuous investment in technology infrastructure and professional development to ensure equitable and effective digital education in Islamic studies.

Keywords: Islamic Education, Digital Innovation, E-Learning.

#### 1. INTRODUCTION

The development of information and communication technology has brought significant changes in various aspects of life, including the field of education. The digital era demands innovation in teaching methods in order to meet the needs and challenges of the times. Islamic Religious Education (PAI) is not spared from this influence, where innovative learning is the key to attracting interest and improving student understanding. Technology has opened up new opportunities for PAI teaching, allowing teachers to take advantage of a variety of digital tools and platforms that make learning more interactive, dynamic, and relevant to everyday life. The use of technology in PAI includes interactive learning applications, e-learning platforms, educational videos, simulations, and social media. Interactive learning apps allow students to participate in quizzes, educational games, and online discussions that actively stimulate their engagement. The e-learning

platform provides easy access to teaching materials, video tutorials, and discussion forums, so students can learn anytime and anywhere. Educational videos and simulations help visualize religious concepts that may be difficult to understand through text alone, such as worship ordinances, Islamic history, and moral values. Social media is also used as a means of communication and collaboration between teachers and students, expanding the scope of learning beyond the classroom (Romadanti, 2023).

This innovation not only makes the material more interesting but also increases students' understanding of the religious concepts taught. For example, the use of animation and simulations in explaining the stories of the Quran can help students understand the meaning and context better. The interaction resulting from this innovative learning method can also increase students' motivation to learn, as they feel more involved and valued in the learning process. Research shows that technology can make learning more effective and enjoyable, improve student learning outcomes and strengthen the relationship between teachers and students. However, the application of technology in PAI teaching also faces challenges. The gap in access to technology between urban and rural areas is a major issue that needs to be addressed. Teachers in rural areas often face limited internet access and adequate technological devices, which hinder the use of digital teaching methods. In addition, teachers' digital readiness and skills are also important factors. Many teachers still feel less confident in using technology and need additional training to develop their competencies. This shows that continuous training and technical support are essential to ensure the successful integration of technology in PAI teaching (Zainal Arifin, 2023).

The development of equitable technological infrastructure and comprehensive training programs for teachers are urgently needed to address these challenges. Governments, educational institutions, and technology providers must work together to ensure that all students, regardless of their geographical or socio-economic background, have equal access to digital learning. Adequate technical support and digital literacy programs for students should also be provided to ensure that technology is used effectively and responsibly. By addressing these challenges and making optimal use of the potential of technology, PAI teaching can become more effective, engaging, and relevant to the needs of the times. Innovations in these teaching methods not only improve the quality of religious education but also better prepare students to face future challenges. Through a holistic and inclusive approach, PAI education can continue to develop and make a positive contribution in shaping a young generation that is knowledgeable, noble, and ready to face the digital era (Raniyah et al., 2024).

Innovation in PAI teaching methods in the digital era involves various approaches and modern technologies, such as the use of interactive learning applications, e-learning platforms, social media, and educational software. The use of this technology not only

facilitates the teaching and learning process, but also helps in delivering religious materials that are more interesting, relevant, and easily accessible to students. Interactive learning apps allow students to be actively involved in the teaching and learning process. For example, interactive quizzes and educational games can make students more interested and motivated to learn. These apps often come with a live feedback feature, which allows students to know their learning outcomes instantly and understand which areas need improvement. In this way, learning becomes more personalized and adaptive to the needs of each student (Laily et al., 2022).

E-learning platforms provide broad and flexible access to a wide range of learning materials. Students can access learning modules, video tutorials, and reading materials anytime and anywhere. The platform also allows for discussion forums and virtual collaboration spaces, where students can exchange ideas and discuss with classmates and teachers. This enriches their learning experience and supports more effective collaborative learning. Social media also plays an important role in PAI's teaching innovation. Teachers can use platforms like Facebook, Instagram, and WhatsApp to communicate with students, share teaching materials, and organize learning activities. Social media also allows for more informal and personal interactions between teachers and students, which can strengthen their relationships and create a more supportive and enjoyable learning environment (Sukana, 2024).

Educational software such as simulators and visualization tools are also used to help students understand complex religious concepts. For example, simulators can be used to practice worship procedures such as prayer or hajj virtually, so that students can better understand the procedures and their meanings. Visualization tools such as infographics and animations help simplify abstract concepts and make them easier to understand. The use of this technology not only makes learning more engaging and interactive, but it also helps to address some of the traditional challenges in teaching PAI. Technology allows for the delivery of more varied and rich material, which can reach a wide range of student learning styles. For example, students who prefer visual learning can take advantage of videos and animations, while students who prefer to learn through reading and discussion can take advantage of e-books and online forums (Mawardi, 2023).

However, the implementation of technology in PAI teaching also requires careful planning and support. Teachers need to be trained on an ongoing basis to develop their digital skills and understand how best to integrate technology in learning. Governments and educational institutions need to ensure that adequate technological infrastructure is available in all schools, especially in areas that are still technologically lagging behind. Additionally, it is important to ensure that the digital content used is in line with Islamic values and supports the goals of religious education. This requires collaboration between

technology developers, education experts, and religious authorities to develop and screen quality learning materials. With a holistic and collaborative approach, innovations in PAI teaching methods in the digital era can provide great benefits for religious education. Technology can make learning more engaging, relevant, and accessible to all students, while improving their understanding of religion and reinforcing their spiritual values. Through continuous innovation, PAI education can play a greater role in shaping a young generation that is knowledgeable, noble, and ready to face challenges in the digital era. Traditional one-way teaching methods are now beginning to shift towards a more participatory and collaborative approach. For example, the use of videos, animations, and simulations can make abstract religious concepts more concrete and easy to understand. In addition, the existence of online discussion forums and virtual learning groups allows for more dynamic interaction and discussion between teachers and students, as well as between fellow students (Basri et al., 2024).

However, innovation in teaching PAI in the digital era also faces various challenges. Some of them are the gap in access to technology between urban and rural areas, the readiness of teachers to master technology, and the supervision and screening of digital content in accordance with Islamic values. Therefore, a comprehensive strategy and policy is needed to ensure that these innovations can be implemented effectively and have a positive impact. This research aims to explore various innovations in PAI teaching methods in the digital era, identify the challenges faced, and provide recommendations to improve the effectiveness of PAI learning. Thus, it is hoped that Islamic religious education can continue to be relevant and contribute to the formation of the character of the younger generation in the midst of digitalization (Elvi Rahmi, 2022).

#### 2. IMPLEMENTATION METHOD

This study uses a qualitative research design with a case study approach to gain an in-depth understanding of innovations in Islamic Religious Education (PAI) teaching methods in the digital era. The research was conducted in several junior and senior high schools in urban and rural areas, with participants consisting of PAI teachers who actively use technology in teaching, students who are involved in PAI classes with innovative teaching methods, and principals and administrators who support the implementation of technology in education. Data was collected through several techniques, namely in-depth interviews, observations, and document analysis. Semi-structured interviews were conducted with PAI teachers, students, and principals to gain insight into their experiences in using technology in PAI teaching, the challenges faced, and their perceptions of the effectiveness of the method. Observations were made in PAI classrooms that used digital teaching methods to see firsthand how technology is used in the learning process, the interaction between teachers and students, and students' responses to the teaching method.

In addition, document analysis is carried out on learning materials, learning implementation plans (RPP), and relevant academic records to understand more about the integration of technology in the PAI curriculum (Sugiyono, 2019).

The data obtained was analyzed using thematic analysis techniques. The analysis stage includes initial coding to identify the initial themes from the interview, observation, and document data; categorization to group similar themes into broader categories; and interpretation to find significant patterns and understand the implications of the findings. To ensure the validity and reliability of the data, this study implements several strategies, such as triangulation using various data sources, member checks by asking participants to review interview transcripts and interpretation of results, and trail audits to record all research procedures and decisions in detail. This research also pays attention to ethical aspects by obtaining permission from the school and participants, maintaining the confidentiality of participants' identities, and ensuring that participants give consent after obtaining complete information about the research objectives and procedures.

# 3. RESULTS AND DISCUSSION

#### Result

# **Innovation of PAI Teaching Methods in the Digital Era**

The results of the study show that various innovations have been applied in the teaching of Islamic Religious Education (PAI) in the digital era. PAI teachers have leveraged technology such as interactive learning apps, e-learning platforms, and social media to enrich teaching materials and make the learning process more engaging. The use of videos, animations, and simulations in explaining religious concepts has been proven to help students understand the material better and increase their interest in learning. Additionally, this technology allows teachers to provide faster and more effective feedback, as well as facilitate collaborative learning between students. These innovations also support more flexible learning, where students can access materials anytime and anywhere, so they can learn at their own pace and learning style. Thus, the integration of technology in PAI not only improves the quality of learning, but also prepares students to face the challenges of an increasingly digital world (Akhyar et al., 2022).

# **Teachers' Experience in Using Technology**

Interviews with PAI teachers revealed that they felt significant benefits from the use of technology in teaching. Teachers report that technology makes it easier to deliver materials, allows the use of more varied learning methods, and improves interaction with students. For example, the use of interactive learning applications and e-learning platforms makes it easier to convey material in a more visual and interactive way, so that it can attract students' attention and improve their understanding. Additionally, social media is used to communicate more effectively with students outside of class hours, strengthen teacher-student relationships, and support continuous learning (Akhyar et al., 2022).

However, some teachers also face challenges, such as limitations in technology mastery and lack of technical support. These challenges include difficulties in operating new learning software, as well as technical constraints such as unstable internet connections. Some teachers feel the need to continue to improve their digital skills through training and workshops in order to maximize the potential of technology in teaching. In addition, there is also a need for adequate technical support from the relevant school or institution to address any technical issues that may arise during the learning process. Thus, although technology brings many benefits, continuous efforts are needed in skill development and technical support so that the integration of technology in PAI teaching can run optimally.

# **Student Response and Perception**

Students involved in this study showed positive responses to innovative teaching methods. They feel that the use of technology makes PAI lessons more interesting and relevant to daily life. The use of interactive applications, videos, and simulations in PAI learning helps students understand the material more deeply and fun. For example, abstract religious concepts become easier to understand through animated visualizations and simulations that present real examples of everyday life. Students also love the flexibility offered by e-learning platforms, which allow them to learn at their own pace and time. This provides an opportunity for students to repeat uncomprehended material without tight time pressure, as well as allowing them to study outside of school hours, which can increase learning effectiveness (Amirudin, 2019).

However, some students admit that there are challenges in accessing technology, especially those who come from rural areas with limited internet infrastructure. These limitations include a slow or unstable internet connection, as well as a lack of adequate technological devices at home. This condition makes it difficult for some students to participate in online learning optimally and feel left behind compared to their peers who have better access to technology. Students who face these challenges often have to look for alternative solutions, such as studying at a friend's house who has better internet access or taking advantage of free internet facilities in public places.

On the other hand, some students also experience obstacles in adapting to new technology and need time to understand how to use e-learning platforms and learning applications. Therefore, while technology provides many benefits in learning, it is important for schools and related parties to provide additional support, such as training in the use of technology for students and the provision of more equitable technology facilities. This will help reduce the digital divide and ensure that all students, without exception, can enjoy the benefits of innovation in PAI teaching.

#### **Challenges of Technology Implementation in PAI**

While there are many benefits to be gained from innovations in PAI teaching, the study also finds some significant challenges. The gap in access to technology between urban and rural areas is one of the main obstacles. Teachers in rural areas often face limited access to the internet and technological devices, which hinders the implementation of digital teaching methods. Inadequate infrastructure conditions, such as slow or unstable internet connections and lack of technology facilities in rural schools, make teachers have

to work harder to be able to utilize technology in their teaching. In addition, many teachers in this area have not been adequately trained in the use of educational technology, so they need special training to be able to integrate technology effectively in the learning process (Zainal Arifin, 2023).

In addition to access and skills issues, there is also an urgent need for surveillance and screening of digital content to ensure that the material delivered is in accordance with Islamic values. The digital content available on the internet is very diverse and not all of them are suitable for religious learning. Therefore, it is important to have a filtering mechanism that can filter out inappropriate content and ensure only the correct and useful material is used in the teaching of PAI. This also applies to the learning applications and elearning platforms used, which must be ensured to have content that is in accordance with the PAI curriculum and does not conflict with Islamic principles. In addition, another challenge found was the need to ensure that all students, regardless of their socio-economic background, have equal access to technology. Financial difficulties can be an obstacle for some students to have personal technology devices such as laptops or tablets that are necessary to participate in online learning. Therefore, efforts are needed from the government and schools to provide more equitable access to technology, for example by providing assistance with technological devices or providing free internet access in schools.

It is also important to create a learning environment that supports the use of technology in PAI teaching, both for teachers and students. This includes providing adequate technical support, such as an IT team that is ready to help address any technical issues that may arise, as well as providing ongoing training programs for teachers to improve their skills in the use of educational technology. Thus, despite these challenges, through collaborative efforts and appropriate support, innovation in teaching PAI in the digital era can continue to develop and provide maximum benefits for Islamic religious education in Indonesia.

## Strategies to Improve the Effectiveness of PAI Learning

Based on the findings of the study, several strategies are recommended to increase the effectiveness of PAI learning in the digital era. First, there needs to be ongoing training for teachers to improve their digital skills. This training should include an in-depth understanding of the use of various educational technology tools, such as interactive learning apps, e-learning platforms, and social media. In addition, teachers should be taught how to effectively integrate these technologies into the PAI curriculum, as well as how to manage virtual classrooms and provide constructive feedback to students. This training program can be carried out through workshops, seminars, or online courses specifically designed to improve teachers' digital literacy. Second, the development of technological infrastructure in rural areas must be a priority to overcome the access gap. The government and related parties need to invest in improving internet infrastructure in areas that are still left behind. This includes improving the quality of internet networks, providing adequate technological devices in schools, and ensuring that all students have access to the necessary technology to keep up with digital learning. In addition, subsidy programs or device assistance for underprivileged students can also help reduce the technology access gap (Basri et al., 2024).

Third, collaboration between schools, governments, and technology providers is needed to ensure that the digital content used in PAI teaching is in line with Islamic values and supports the goals of religious education. Technology providers and educational app developers must work closely with PAI experts to create content that is relevant and appropriate to the curriculum. It also includes strict supervision of the digital content accessed by students to ensure that the material studied is not only accurate but also in accordance with Islamic principles. Governments and educational institutions should develop clear policies and standards regarding the use of technology in religious education, as well as conduct periodic evaluations to ensure that digital content remains relevant and up-to-date. In addition, the promotion of a strong digital literacy culture among students and teachers is also important. Digital literacy includes not only the ability to use technology, but also the ability to critically and ethically assess information. Students should be taught how to find, evaluate, and use digital information wisely, while teachers should be models in good digital literacy practices. By implementing these strategies, it is hoped that the challenges that exist in PAI learning in the digital era can be overcome, and the benefits of technology can be maximized to improve the quality of Islamic religious education. Through cooperation and continuous efforts, PAI education can continue to evolve and adapt to technological advancements, providing a richer and more relevant learning experience for students.

#### **Discussion**

# **Successful Innovation in PAI Teaching**

The results of this study show that innovations in Islamic Religious Education (PAI) teaching methods in the digital era have a positive impact on the learning process. The use of technology such as interactive learning apps, videos, and simulations not only makes the material more engaging but also increases students' understanding of the religious concepts taught. With technology, complex concepts can be visualized more clearly and interestingly, making it easier for students to understand and remember the material. For example, the use of animated videos to illustrate stories in the Quran or interactive simulations to explain worship rituals can make learning livelier and more contextual. This is in line with the findings of previous research which stated that technology can increase students' motivation to learn and make learning more effective and fun (Suryani, 2020).

However, this study also identifies several challenges faced in the implementation of technology in PAI teaching. One of the main issues is the gap in access to technology between urban and rural areas. Teachers in rural areas face limited internet access and adequate technological devices, which hinder the use of digital teaching methods. Slow or unstable internet connections and the lack of technological devices in rural schools are major obstacles in the application of technology in learning. This challenge underscores the importance of developing an equitable technological infrastructure to ensure that all students can access digital learning properly(Gunarsih, 2023).

In addition, limited resources and technical support in rural areas are also an obstacle. Teachers often have to struggle alone in learning and implementing new technologies without adequate assistance. To address this, there is a need for ongoing training programs provided by governments or educational institutions to improve teachers'

digital skills, as well as easily accessible technical support. Furthermore, it is also important to consider the aspect of digital content surveillance and screening. The use of technology in religious education must ensure that all materials presented are in accordance with Islamic values. Collaboration between schools, governments, and technology providers is indispensable to develop content that is relevant and in accordance with the PAI curriculum. This includes the development of e-learning apps and platforms designed specifically for religious education, which not only provide accurate materials but also conform to Islamic principles.

By addressing these challenges and making optimal use of technology, PAI teaching can become more effective and engaging. Innovations in these teaching methods not only improve the quality of learning but also help prepare students to face challenges in the digital age. Through strong collaboration between all relevant parties, PAI education in Indonesia can continue to grow and have a greater positive impact on students across the country.

# **Teacher Experience and Readiness**

Teachers' experience and readiness in adopting technology are also key factors in the success of this innovation. Teachers who have adequate digital skills can utilize technology more effectively in their teaching. They are able to integrate various digital tools and platforms into the curriculum, create engaging and interactive teaching materials, and provide a more immersive learning experience for students. For example, teachers who are skilled in using learning apps can design interactive quizzes, online discussions, and assignments that utilize technology to test and reinforce student understanding. They can also quickly adjust their teaching methods based on the feedback received through the elearning platform. However, research shows that some teachers still feel less confident in using technology and need additional training. These teachers may feel overwhelmed by rapid changes in technology and a lack of prior experience in using digital tools. This self-doubt can hinder them from exploring the full potential of technology in teaching and negatively impact the effectiveness of learning. In addition, a lack of understanding of technology can also lead to errors in the use of digital tools, which in turn can lead to frustration for students and teachers (Hasriadi, 2022).

This shows that continuous training and technical support are essential to improve teacher competence in the digital era. Training should not only cover the basics of using technology, but also innovative teaching strategies that utilize technology. For example, training should include how to design effective digital teaching materials, how to facilitate collaborative learning online, and how to use data from e-learning platforms to assess student progress and adjust teaching strategies. Technical support is also very important to ensure that teachers can address any technical issues that may arise during the teaching process. Schools must provide a technical support team that is ready to help teachers quickly when they encounter problems, so that the learning process is not disrupted. In addition, the existence of a forum or community for teachers to share experiences and technology solutions can also be very useful.

In addition, governments and educational institutions need to develop policies that support continuous professional development for teachers. This could include incentives to attend technology training, providing specific time in teachers' work schedules to learn new technologies, and recognizing technology competencies as part of teacher performance evaluations. By improving digital skills and providing the necessary support, teachers will be better prepared and confident in using technology to improve the quality of PAI teaching. This will not only enhance the learning experience for students but also prepare them to better face future challenges. Innovation in PAI teaching through technology, with the right support, can bring about a positive transformation in religious education in the digital era.

## **Student Response to Digital Learning**

The positive response from students to digital learning shows that the younger generation is more responsive to innovative and technology-based teaching methods. They feel that technology makes learning more interesting and relevant to daily life, which in turn increases their motivation and interest in learning. The use of tools such as videos, interactive apps, and simulations not only makes the material easier to understand but also allows for more dynamic and interactive learning. For example, students can participate in online discussions, easily access additional resources, and work on interactive exercises that provide hands-on feedback. The flexibility offered by e-learning platforms allows students to learn at their own pace and time, thus increasing learning independence. This is especially beneficial for students who have a busy schedule or who prefer to study outside of school hours. They can repeat material that they have not understood without feeling rushed, as well as arrange their own study time to be more efficient. Thus, e-learning platforms not only support formal learning but also enable more effective self-paced learning (Solichin et al., 2023).

However, there is a need to ensure that all students, including those with limited access to technology, can experience the same benefits from these innovations. Unequal access to technology can lead to gaps in the quality of education received by students from different backgrounds. Students who live in rural areas or come from families with low economic conditions may face great challenges in accessing adequate technological devices and stable internet connections. This can hinder their ability to fully participate in digital learning and take advantage of the various tools and resources available. To overcome this problem, concrete steps are needed from the government and educational institutions. Investing in technology infrastructure in underdeveloped areas is essential to ensure that all students have equal access to digital learning. Subsidy programs or assistance with technology devices for underprivileged students can also be a solution to reduce this gap. In addition, schools must provide adequate technological facilities, such as computer labs and free internet access, so that all students can learn optimally.

Additionally, it is important to develop programs that support digital literacy for students of all backgrounds. Digital literacy includes the ability to use technology effectively, as well as understanding and critically assessing digital information. These programs can help students who are less experienced with technology to develop the skills they need to succeed in digital learning. By ensuring that all students have equal access to technology and supporting them in developing the necessary digital skills, we can maximize the benefits of innovation in PAI teaching. This will not only improve the quality of education but also help create a more equitable and inclusive society in the

digital era. Through collaboration between governments, schools, and communities, we can ensure that all students, regardless of their background, have equal opportunities to learn and thrive in a technology-enabled environment.

# **Implications and Recommendations**

The findings of this study have several important implications. First, there is a need for policies and strategies that support the development of technological infrastructure in rural areas to overcome access gaps. Second, ongoing training for teachers is essential to improve their digital skills and ensure that they can effectively utilize technology in teaching. Third, collaboration between various parties, including schools, governments, and technology providers, is needed to develop digital content that is in line with Islamic values and supports the goals of religious education. This research has several limitations that need to be considered. The study was only conducted in a few schools in urban and rural areas, so the findings may not be generalized to all PAI educational contexts. In addition, this research focuses more on the experiences and perceptions of teachers and students, so further research that includes quantitative analysis and evaluation of learning outcomes is also needed to provide a more comprehensive picture. Innovations in PAI teaching methods in the digital era bring many benefits, including increasing students' interest and understanding of teaching materials. However, challenges such as technology access gaps and teacher training needs must be addressed to ensure effective implementation. With the right strategy, Islamic religious education can continue to be relevant and adaptive in the midst of rapid technological development (Oktavia & Khotimah, 2023).

#### 4. CONCLUSION

This study shows that innovations in Islamic Religious Education (PAI) teaching methods in the digital era have a significant positive impact on the learning process. The use of technology such as interactive learning apps, videos, and simulations not only makes the material more engaging but also increases students' understanding and interest. Teachers' experience and readiness to use technology play an important role in the success of these innovations. Teachers who are skilled in technology can utilize various digital tools to deliver PAI material more effectively. However, the study also identifies some challenges that need to be addressed to ensure effective implementation. The gap in access to technology between urban and rural areas is a major obstacle, as well as the need to improve teachers' digital skills through continuous training. The response of students to innovative teaching methods has been very positive, indicating that the younger generation is more responsive to technology-based approaches. However, access gaps need to be considered so that all students can enjoy the benefits of these innovations. To address these challenges, equitable development of technology infrastructure, ongoing training for teachers, and collaboration between schools, governments, and technology providers are

needed to develop digital content that is in line with Islamic values. Thus, Islamic religious education can continue to be relevant and adaptive in the midst of rapid technological development, as well as contribute to the formation of the character of the younger generation.

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