

INNOVATION OF ISLAMIC EDUCATION TEACHING METHODS BASED ON ICT IN SECONDARY SCHOOLS

Muhammad Ruslan^{1*}

¹Faculty Of Islamic Studies, University of Muhammadiyah Sumatera Utara, Indonesia

^{*}*email:* muhammadruslan@umsu.ac.id

Abstract: This article discusses the Innovation Of Islamic Education Teaching Methods Based On Ict In Secondary Schools. The method used in this article is a literature review method, derived from literature with facts obtained from the field. The data or materials are sourced from the library, including books, journals, articles, and so on. Data sources are also gathered by collecting literature sources to obtain theoretical information and explanations. The data analysis technique involves summarizing, presenting data, and drawing conclusions. Innovative learning methods can stimulate students to actively participate in the learning process, thereby improving the overall quality of education. The digital era demands the need for teachers' creativity, such as using various innovative methods, to prevent their roles from being replaced by rapidly advancing technology. Some learning methods that can be used to support innovative learning include flipped learning, blended learning, and e-learning.

Keywords: Innovation, Learning Methods, Islamic Religious Education, Secondary School

Introduction

The morality and character of students are greatly influenced by Islamic Religious Education, especially when they are in secondary school. (Mudrik, 2023). With the advancement of digital technology, shifts in cognitive styles, and the increasingly complex demands of society, innovative approaches in education are necessary to ensure that Islamic Religious Education is practical and relevant. (Adlina, 2022).

Planned steps to enhance students' educational experience involve the use of Information Technology (IT) in learning strategies. (Febrianti et al., 2023). Therefore, this research aims to analyze the urgency of innovation in teaching methods based on Information Technology for Islamic education at the secondary school level.

This innovation involves adjustments in the integration of technology within the curriculum framework, learning assessments, teaching methodologies, as well as the use of technology in instruction. (Asari et al., 2023). It is expected that the use of information technology will enhance students' understanding of Islamic concepts, enrich the teaching and learning process, and assist in the development of skills needed for future requirements.

A profound understanding of potential obstacles in implementing this innovation, such as those related to infrastructure, teacher preparation, and student acceptance. (Rahmawati & Nurachadija, 2023), will also be part of this research. The use of IT in learning allows for education to take place even without direct face-to-face interaction, as witnessed during the COVID-19 pandemic. (Harfiani et al., 2021). In this framework, this research seeks to identify potential obstacles and formulate methods to overcome them.

The development of information technology should not necessarily lead to the detachment of moral values from students' primary guidance, namely the Quran and hadith. (Samudra & Zailani, 2023). Therefore, the integration of faith and piety (iman dan imtaq) in the use of

information technology should be the foundation for implementing innovative teaching methods at the secondary school level.

It is expected that through this research, IT-based teaching methods can be thoroughly examined to elevate the standards of Islamic Education at the secondary school level. This not only serves as a model for the creation of advanced teaching strategies in various fields of religious education but also aids students in better understanding Islamic teachings.

Literature Review

Islamic Religious Education in the Digital Era

With the advancement of information technology, Islamic religious education must evolve to remain relevant. (Azra, 2012). According to several studies, the use of information technology in teaching Islamic religious education can enhance students' learning outcomes and quality, making the process more dynamic and engaging for learners. (Adiyono et al., 2023). Information technology can make Islamic religious education resources more easily accessible to a wide audience. The use of technology in education involves online platforms, multimedia, and e-learning applications. The integration of information technology in Islamic religious education enhances students' understanding of religious concepts and moral principles, as investigated by. (Alwiyah & Sayyida, 2020).

Several approaches in IT-based learning have been proposed to enhance Islamic religious education. For example, blended learning strategies can provide flexibility and maximum engagement by combining online and face-to-face learning. (Glazer, 2023). The benefits of game-based learning methods in increasing students' interest and motivation in Islamic religious education have been further evidenced through research conducted by. (Islami & Soekamto, 2022).

The integration of information technology in Islamic religious education faces several challenges alongside its potential positives. This involves limited access to technology, infrastructure availability, as well as issues related to content and the quality of educational resources. (Amadi & Sholikha, 2023) Therefore, there is a need for well-thought-out strategies to overcome these obstacles so that the innovation of IT-based learning methods can be effectively implemented.

Several studies indicate that the implementation of innovative IT-based Islamic religious education methods in secondary schools can have positive impacts, including improved understanding of religious concepts, increased student engagement, and overall academic achievement enhancement. (Adi et al., 2021).

By detailing this literature review, it is hoped to provide a strong foundation of understanding regarding the innovation of IT-based Islamic religious education teaching methods in secondary schools. These points can serve as a basis for designing and developing further research that focuses on the implementation and evaluation of the effectiveness of these teaching methods.

Method

This research employs a qualitative method with a library research approach. This approach is necessary to analyze how the innovation of IT-based Islamic religious education teaching methods is applied and influences the learning process in secondary schools, so that teaching can be carried out effectively and efficiently. Data collection techniques involve reviewing theories, expert opinions, and relevant research findings. Data analysis techniques include data collection, data reduction, and drawing conclusions. Data search is focused on the topic of innovation in IT-based learning methods.

Result and Discussion

Results

The research results indicate that the innovation of IT-based Islamic Education (PAI) learning methods in secondary schools is a form of compliance with the Ministry of Education and Culture regulations to ensure that the implementation of learning is carried out with an enjoyable concept. (Widodo, 2017). Innovations in IT-based learning methods can enhance students' learning activities. This is evident from the increased engagement of students in participating in lessons, heightened participation in discussions, and improved learning outcomes for the students. As for the positive impacts of using IT in learning, these include:

a. Students' engagement in participating in learning

In conventional learning, students tend to be passive and merely listen to the teacher's explanations. However, in IT-based learning, students are more active in participating. This is evident from the increased frequency of students asking questions, responding to queries, and expressing their opinions. Partisipasi peserta didik dalam diskusi

In conventional learning, discussions often do not proceed effectively because students are less active in participating. However, in IT-based learning, discussions can be more effective as students can actively participate through online discussion forums.

b. Learning outcomes of students

In conventional learning, students' learning outcomes tend to be low because the lessons are less engaging and not relevant to everyday life. However, in IT-based learning, students' learning outcomes can improve as the learning becomes more interesting, interactive, and relevant to daily life.

Furthermore, there are several forms of innovation that can be utilized in Islamic Education (PAI) learning. These innovations include: Pembelajaran Berbasis Game Kuis (Game-Based Learning):

1. Development of educational games that can assist students in understanding lesson concepts in a fun and interactive way. Utilizing game elements such as points, levels, and challenges to enhance student motivation and engagement. Some applications that can be used in this quiz-based game learning include:

a. Kahoot Application

Kahoot is A game-based learning tool called Kahoot is often used in quiz contests to enhance educational activities. Participants who respond swiftly get more points or a better score on the application. This programme allows you to ask questions using both picture and video formats. Teachers may also set aside a certain amount of time for every enquiry.



Picture 1: Kahoot Application

b. Quizizz Application

Quizizz is An online tool for making interactive tests is called Quizizz. This software for creating games features a visually pleasing interface with vibrant themes and animations. Additionally, Quizizz gives quiz producers the ability to annotate question responses. Several question types are accessible, such as polling, multiple-choice, fill-in-the-blank, checkboxes, and open-ended enquiries.



Picture 2: Quizizz Application

c. Wordwall Application

Wordwall is a program for creating games with randomly ordered alphabet letters and words inserted. It functions similarly to games with crossword puzzles. Wordwall offers eighteen free templates for usage. Games that have been created may be shared via social media, email, and Google Classroom.



Picture 3: Wordwall Application

d. Quizlet Application

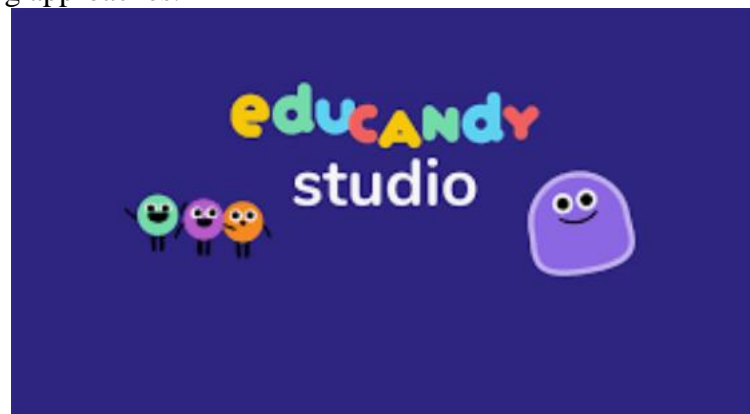
Quizlet uses flashcard sets to provide a quiz-based learning approach. Teachers may design multiple-choice, video, graphic, and structured text questions, among other options. This platform is appropriate for any topic emphasising vocabulary, including language courses.



Picture 4: Quizlet Application

e. Educatandy

Educatandy is An interactive learning game is called Educandy. Teachers only need to enter the questions and answers they want, and Educandy will take care of the rest, converting your information into interactive exercises. Students may play the game using a unique code generated when it is created. These five apps for creating games may be used to improve educational activities. Teachers may use these apps to keep pupils from disinterested in traditional teaching approaches."



Picture 5: Educatandy Application

The above applications are programs that can be used as IT-based learning media. Islamic Education (PAI) learning will become more interesting and interactive when using these applications. Engaging learning experiences will be effective in capturing the students' hearts. This also addresses the challenge of PAI education being perceived as dull, monotonous, and uninteresting. Therefore, PAI teachers should enhance their skills in utilizing IT-based learning media. Pembelajaran Online (E-Learning)

Online learning (E-Learning) has become a significant phenomenon in the field of education, including the teaching of Islamic Religious Education (PAI) in secondary schools. Especially since the emergence of the global pandemic in 2020, online education has become the primary alternative to continue the learning process amid limitations in physical access to schools.

One of the main advantages of online learning is its broader accessibility. Students can access PAI learning materials from anywhere, as long as they have an internet connection.

This provides great flexibility and allows students to learn at times that are more convenient for them. Additionally, various online resources such as instructional videos, interactive modules, and discussion forums can enhance students' understanding of PAI lessons.

However, there are several challenges that need to be addressed in the context of online PAI learning. One of them is the lack of direct interaction between teachers and students. Religious education often involves discussions, understanding values, and practicing worship, which may be challenging to achieve effectively through online platforms. Therefore, it is important to create virtual spaces that support active interaction and discussion between students and teachers.

Furthermore, it is crucial to ensure that online-delivered PAI learning materials cover practical aspects and direct experiences, such as worship practices and the application of religious values in daily life. Online learning can also be utilized to integrate technology seamlessly into the teaching of PAI, such as applications to facilitate the memorization of the Qur'an or simulations of historical journeys in Islam.

During the online learning process, the role of parents also becomes more significant in supporting their children's understanding and practice of religion. Parents can actively monitor their children's virtual attendance, provide moral support, and ensure that the religious values taught in school are reflected in daily life.

By leveraging technology and addressing specific challenges in PAI, online learning can be an effective tool in shaping a generation with a deeper understanding of Islamic teachings and the ability to apply these values in their lives.

2. Project-Based Learning (Pembelajaran Berbasis Proyek) with Technological Support

Project-Based Learning (Pembelajaran Berbasis Proyek atau PBL) supported by technology can be an innovative and effective approach in the teaching of Islamic Religious Education (PAI) in secondary schools. This approach not only provides conceptual understanding but also encourages students to apply their knowledge in the context of everyday life.

One example of implementing PBL in the learning of Islamic Cultural History is "Building an Interactive Learning Application to Understand the Stories of Prophets." Each student is assigned to choose one story of a prophet, conduct in-depth research on their life and teachings, and design an interactive learning application using technology. This project encompasses not only historical and theological aspects but also develops students' information technology and communication skills.

Students work in small groups, and each group has specific responsibilities. Some students serve as researchers, delving into the historical and theological aspects of the chosen prophet's story. Others are responsible for developing interactive content, such as animated videos, interactive questions, and learning modules. The use of technology, such as graphic design software, video makers, and online learning platforms, serves as the primary means to realize this project. Applications like Canva and others can be used during the task execution.

Throughout the learning process, the teacher plays the role of a guide, providing guidance and supporting student groups in problem-solving or overcoming obstacles. Students learn not only from the teacher but also from each other through collaboration and discussions.

As a result, after a few weeks, each student group successfully creates an engaging and informative interactive learning application. During the final project presentation, they showcase not only their technical skills but also a profound understanding of the moral values and ethics contained in the prophet's stories they chose.

Through this approach, students not only learn PAI conventionally but also develop critical thinking, collaborative, and technological skills. They don't just memorize facts but understand how to apply religious values in their daily lives. Project-Based Learning with technological support in secondary schools becomes an innovative step in preparing students to become competent and meaningful individuals in society.

3. Adaptive Learning

The education world is undergoing a significant transformation with the introduction of technology-based adaptive learning in the subject of Islamic Religious Education (PAI). Teachers lead this initiative to ensure that each student can learn according to their own level of understanding and learning pace.

At the beginning of each semester, students are assessed through an online learning platform to gauge their abilities and understanding of PAI materials. Based on the results of these assessments, the adaptive learning system automatically adjusts the lesson plans for each student. Students who need further understanding are provided with additional materials and deeper exercises, while those who have mastered certain concepts are encouraged to explore more advanced topics or given challenging creative assignments.

Teachers utilize various technological tools, such as adaptive learning platforms, e-book applications, and interactive simulations to help students understand PAI concepts in an engaging manner. For example, in learning about the history of Islam, students can use interactive applications that depict the historical journey with appealing graphics, making it easier for them to comprehend the historical context and values contained within.

Additionally, each student has access to an online platform that stores their personal learning records, allowing them to access materials anytime and anywhere. This provides flexibility for students to manage their learning time according to their individual pace and learning styles. Teachers also leverage learning analytics to track the progress of each student. With this data, they can provide more specific and personalized feedback to each student, helping them identify areas that need improvement or further development.

Adaptive learning brings positive changes. Students not only experience more personalized learning but also feel more motivated to delve deeper into their understanding of Islamic teachings. With technology as a partner in the PAI learning process, this achievement proves that innovation in education can create an inclusive, responsive, and relevant learning environment for the needs of every student.

4. Augmented Reality (AR) and Virtual Reality (VR) in Learning

The journey of innovation in Islamic Religious Education (PAI) learning reaches its peak with the use of Augmented Reality (AR) and Virtual Reality (VR) to enhance students' learning experiences. PAI teachers lead this effort to create a profound and interactive learning environment. Teachers introduce the concept of learning about the Masjid al-Haram in Mecca using AR technology. Each student is equipped with an AR device, and when they point the device at specific textbooks or images, a 3D representation of Masjid al-Haram appears in front of them. Students can observe the structure of the building, study its architecture, and explore the surrounding area virtually, as if they were right at the location.

Furthermore, Mrs. Siti also utilizes VR technology to provide a deep learning experience in the study of Hajj and Umrah. Students are given VR headsets and guided through interactive simulations that depict each stage of the Hajj pilgrimage. They can feel the atmosphere of the Kaaba, perform the Tawaf, and participate in other Hajj activities. All of this is done virtually, providing a more realistic and immersive experience, as if students were in the midst of the Hajj pilgrimage.

Not only that, Mrs. Siti also designs a VR-based learning experience that invites students to explore historical Islamic sites. With VR technology, students can "visit" historical places such as the city of Madinah during the time of the Prophet, attend important events in Islamic history, and witness how religious messages were disseminated in the early days of Islam.

The use of AR and VR not only enriches students' understanding of Islamic teachings but also enhances their motivation to learn and their interest in this subject. Students feel more engaged and inspired because they can directly experience the beauty and depth of Islamic teachings. With the presence of AR and VR technology, an innovative learning atmosphere is created, allowing students to experience the wonders of Islam through captivating visual experiences. This initiative not only opens a window to the world of Islam but also opens the door to a deeper and more personal understanding of religious values.

Discussion

The innovation of IT-based Islamic Religious Education (PAI) learning methods aligns with the opinions of experts and can enhance students' learning activities due to several factors, including:

- a. The use of engaging and interactive IT technology

IT technology can be used to make learning more engaging and interactive. This can enhance the motivation and interest of the learners. Learning that is more relevant to everyday life. Learning materials that are relevant to daily life can make the learning more meaningful for the participants. This can improve the understanding and absorption of learning materials by the participants.

- b. Providing opportunities for learners to study independently.

IT-based learning provides opportunities for learners to study independently. This can enhance the learners' ability to study on their own. This innovation is crucial to maintaining the quality of classroom learning, and, furthermore, it embodies the spirit of modern learning. Modern learning will uphold the existence of Islamic education. Otherwise, education may be left behind. (Azra, 2012)

The role of innovation in IT-based learning methods can be seen in the following table:

Aspect	Before Using IT	After Using IT
Student Engagement	Low	High
Student Participation in Discussions	Low	High
Student Learning Outcomes	Low	High

Table 1: The Influence of IT-based Learning Method Innovation

Conclusion

From the research results on the innovation of Islamic Religious Education (PAI) learning methods based on Information Technology (IT) in secondary schools, it can be concluded that the implementation of technology in teaching PAI has a significant positive impact on the teaching and learning process. This innovation not only enhances student engagement but also expands the learning space and improves their understanding of Islamic teachings. The research results also indicate that the integration of technology in PAI learning can increase students' motivation to learn and understand the values of Islam. The existence of online platforms, interactive applications, and visual simulations provides students with easier and more engaging access to learning materials.

References

- Adi, N. N. S., Oka, D. N., & Wati, N. M. S. (2021). Dampak positif dan negatif pembelajaran jarak jauh di masa pandemi covid-19. *Jurnal Ilmiah Pendidikan Dan Pembelajaran*, 5(1), 43–48.
- Adiyono, A., Julaiha, J., & Jumrah, S. (2023). Perubahan Pengembangan Kurikulum Pendidikan Agama Islam Di Madrasah Aliyah Negeri Insan Cendikia Paser. *IQRO: Journal of Islamic Education*, 6(1), 33–60.
- Adlina, N. (2022). Inovasi pembelajaran di masa pandemi covid-19 dengan pendekatan steam di era society 5.0. *JURNAL SYNTAX IMPERATIF: Jurnal Ilmu Sosial Dan Pendidikan*, 2(6), 619–627.
- Alwiyah, A., & Sayyida, S. (2020). Penerapan E-Learning untuk Meningkatkan Inovasi Creativepreneur Mahasiswa. *ADI Bisnis Digital Interdisiplin Jurnal*, 1(1 Juni), 35–40.
- Amadi, A. S. M., & Sholikha, D. W. (2023). Perkembangan Pendidikan Bahasa Arab di Era Digital: Systematic Literature Review. *Jurnal Motivasi Pendidikan Dan Bahasa*, 1(3), 301–309.
- Asari, H., Nurmawati, N., & Ruslan, M. (2023). Opportunities and Challenges of Modernizing The Educational System of The Tahfidz Boarding School Medan City. *Edukasi Islami: Jurnal Pendidikan Islam*, 12(03).
- Azra, A. (2012). *Pendidikan Islam Tradisi dan Modernisasi di Tengah Tantangn milenium III* (I). Kencana Prenadamedia Group.
- Febrianti, I., Tuffahati, J., Rifai, A., Affandi, R. H., Pradita, S., Akmalia, R., & Siahaan, A. (2023). Pengaruh Penggunaan Teknologi Informasi Dalam Manajemen Perencanaan Pendidikan Untuk Meningkatkan Efisiensi Pendidikan. *Academy of Education Journal*, 14(2), 506–522.
- Glazer, F. S. (2023). *Blended learning: Across the disciplines, across the academy*. Taylor & Francis.
- Harfiani, R., Mavianti, M., & Setiawan, H. R. (2021). Model Manajemen Pembelajaran Pada Masa Pandemi. *Seminar Nasional Teknologi Edukasi Sosial Dan Humaniora*, 1(1), 487–498.
- Islami, M., & Soekamto, H. (2022). Efektivitas Model Pembelajaran Inquiry Menggunakan Quizizz Multimedia Berbasis Gamification terhadap Kemampuan Berpikir Kritis Siswa. *Jurnal Ilmiah Pendidikan Profesi Guru*, 5(2), 383–392.
- Mudrik, M. (2023). Pengaruh Pembelajaran Pendidikan Agama Islam dalam Pembentukan Karakter Moderat Siswa di Sekolah: Sebuah Analisis Pedagogi Sosial. *JIIP-Jurnal Ilmiah Ilmu Pendidikan*, 6(3), 2011–2017.
- Rahmawati, S., & Nurachadija, K. (2023). Inovasi Pendidikan dalam Meningkatkan Strategi Mutu Pendidikan. *BERSATU: Jurnal Pendidikan Bhinneka Tunggal Ika*, 1(5), 1–12.
- Samudra, M. J., & Zailani, Z. (2023). Pendidikan Adab Dalam Perspektif Pemikiran Imam Nawawi Dalam Kitab At-Tibyan Fi Adabi Hamalatil Quran. *Jurnal Pendidikan Indonesia (JOUPI)*, 1(3), 30–40.
- Widodo, W. (2017). Wujud kenyamanan belajar siswa, pembelajaran menyenangkan, dan pembelajaran bermakna di sekolah dasar. *Jurnal Ilmiah Ar-Risalah: Media Ke-Islaman, Pendidikan Dan Hukum Islam*, 14(2), 22–37.