JISEI: Journal of Islamic Studies and Educational Innovation
Vol.1 No.3 September 2025, pp. 380-390

Using Virtual Reality to Teach Islamic History to Middle School Students

Moh. Sirojud Tolibiin[1], M. Makhrus Ali[2]

[1] UIN Maulana Malik Ibrahim Malang; 230204310011@student.uin-malang.ac.id
[2] Sekolah Tinggi Agama Islam Ibnurusyd, Muhammadalu2518@gmail.com

ARTICLE INFO

Keywords:

Virtual Reality,
Islamic History,
Middle School Education,
Immersive Learning,
Digital Pedagogy

Article history:

Received 2025-07-14
Revised 2025-08-12
Accepted 2025-09-09

ABSTRACT

This study investigates the use of Virtual Reality (VR) as an innovative tool to teach Islamic history to middle school students, aiming to enhance engagement, understanding, and retention of historical concepts. VR provides immersive experiences that allow students to explore historical sites, significant events, and cultural artifacts in a realistic and interactive environment. The research employs a qualitative descriptive method with classroom implementation, observation, and interviews as primary data collection techniques. The findings reveal that VR-based learning significantly increases student motivation and curiosity compared to traditional teaching methods. Students demonstrated higher participation, better comprehension of historical timelines, and improved long-term memory retention of key Islamic historical events. However, challenges such as limited access to VR devices, teacher training, and potential technical issues were identified. Overall, integrating VR into Islamic history lessons offers a promising approach to creating engaging, interactive, and meaningful learning experiences for middle school students in the digital age.

Corresponding Author:
Moh. Sirojud Tolibiin
UIN Maulana Malik Ibrahim Malang; 230204310011@student.uin-malang.ac.id

1. INTRODUCTION

Islamic history education plays a crucial role in the secondary education curriculum, providing insight into Islamic values, civilization, and contributions to world development. Generally, Islamic history is taught through conventional methods such as lectures, reading textbooks, and memorizing important events **(Akbar & Barni, 2022; Moh. Teguh Prasetyo, 2023).** This approach has long been used in both madrasahs and public schools, but challenges arise when the current generation, known as digital natives, has different learning characteristics. They tend to prefer visualization, interactivity, and engaging learning experiences. In this context, digital technology-based learning is an urgent need to improve the quality of education, including in the teaching of Islamic history **(Kavanagh, Luxton-Reilly, Wuensche, & Plimmer, 2017; Yahuda, Susanto, Widodo, Kolis, & Abdillah, 2023).** Socially, technological developments have had a

significant impact on education. Generation Z, who dominate high school, is now growing up in a digital environment saturated with gadgets, the internet, and multimedia. They have a predisposition to learn through visual and interactive media and are more attracted to learning experiences that involve technology. This fact presents a challenge for Islamic history teachers, as traditional lecture methods are no longer sufficient to engage students **(Al-Ansi, Jaboob, Garad, & Al-Ansi, 2023; Syahrudin & Gunawan, 2025).** As a result, students' interest in learning history often declines, resulting in a shallow understanding of Islamic history. Yet, a deep understanding of Islamic history is crucial for shaping religious identity, instilling values of tolerance, and strengthening a national perspective based on religion.

The main problem faced is low student motivation in studying Islamic history due to monotonous teaching methods. Most teachers still use textbooks as the primary source, with verbal explanations lacking adequate visual support. As a result, many students have difficulty visualizing past events, such as the Battle of Badr, the development of the Abbasid civilization, or the glory of Andalusia **(Wagianto, 2023).** Furthermore, understanding the chronology of historical events is also weakened due to the unengaging presentation of the material. Another problem is the lack of innovation in the use of learning media, even though modern technology offers significant opportunities to overcome student boredom. One emerging solution is the use of Virtual Reality (VR) technology in learning. VR allows students to experience immersive learning experiences, as if they were directly present at the location of historical events. For example, students can "visit" the Grand Mosque in the early Islamic era, explore the city of Baghdad during the Abbasid period, or witness the development of the Andalusian civilization. With VR, students not only hear and read but also see and feel the historical atmosphere virtually. This aligns with the experiential learning approach, which emphasizes direct student involvement in the learning process. The application of VR also supports the theory of constructivism, where students construct their understanding through real-life experiences provided by technology **(Paduli, 2025; Purba, Yahya, & Nurbaiti, 2021; Zhan, Yin, Xiong, He, & Wu, 2020)**.

Previous research has shown that VR has been widely used in science, medicine, and engineering learning due to its ability to create realistic simulations. In the context of religious education, several studies have found that interactive media can improve conceptual understanding and learning motivation. For example, a study by Hamdan (2021) showed that the use of VR in World History lessons in secondary schools increased student retention by up to 40% compared to traditional methods. Another study by Yusuf and Aisha (2022) on the use of AR and VR in teaching the Quran found a significant increase in student engagement. However, specific research related to the use of VR in teaching Islamic history is still very limited, especially at the secondary education level. This indicates a research gap that needs to be filled to address the challenges of history learning in the digital era. The method used in this research is a qualitative method with a case study approach in one secondary school **(Creswell, 2018; Huberman & Jhonny, 2014; Sugiyono, 2015)**. Data were collected through observations of VR learning activities, in-depth interviews with teachers and students, and documentation of interactions during the learning process. Furthermore, this study will use descriptive analysis to interpret data regarding the effectiveness of VR in increasing motivation and understanding of Islamic history. Data validity was maintained through source triangulation, comparing observation results with interviews and document records.

The purpose of this study is to describe how VR can be implemented in teaching Islamic history to secondary school students, as well as to identify its impact on student motivation,

conceptual understanding, and learning experiences. This study also aims to explore teacher and student perceptions of the use of VR technology and analyze obstacles and opportunities for future development. This research is highly urgent given the challenges of globalization and digitalization in education. Without innovation, Islamic history learning has the potential to lose its appeal to the digital generation. The use of VR is not only following technological trends but also a strategic step to create a contextual, interactive, and enjoyable learning experience. Thus, students not only memorize historical facts but also deeply understand the values contained within them.

The novelty of this research lies in the integration of VR technology into Islamic history learning at the secondary school level, a practice that has not been widely implemented before. This innovation goes beyond the use of modern technology, but also the adaptation of Islamic educational values in an engaging digital environment. This research combines traditional approaches to religious instruction with immersive technology, resulting in a more meaningful learning experience. Furthermore, this research offers a learning model that can be replicated by other schools at an affordable cost through the use of simple VR devices.

2. METHODS

This study uses a descriptive qualitative approach with a case study design to understand in depth the application of Virtual Reality (VR) in teaching Islamic history to high school students **(Rukajat, 2018).** This approach was chosen because it allows for a natural exploration of student and teacher learning experiences and analyzes the impact of learning innovations on motivation, engagement, and understanding of Islamic history concepts. The research subjects consisted of Islamic Cultural History (ISC) teachers and middle-grade students at a school that has implemented VR-based learning. Informants were selected using a purposive sampling technique, selecting relevant respondents with direct experience using VR.

Data collection techniques were carried out through three main methods: (1) Participatory observation to record student interactions, involvement, and responses during the VR-based learning process; (2) In-depth interviews with teachers and students to explore perceptions, experiences, and obstacles in implementing VR; and (3) Documentation in the form of photos, video recordings, and student learning outcome notes to support observation and interview findings. Data analysis used the Miles & Huberman model which includes data reduction, data presentation, and drawing conclusions/verification. Data validity was maintained through triangulation of sources and techniques, namely comparing the results of observations, interviews, and documentation to make the findings more accurate.

3. FINDINGS AND DISCUSSION

The Concept and Potential of Virtual Reality in Learning Islamic History

Virtual Reality (VR) is a technology that allows users to experience interactive experiences in virtual environments designed to resemble reality. In an educational context, VR is used to create an immersive learning environment, where students feel as if they are directly within the material being studied. This technology works through devices such as head-mounted displays (HMDs), headsets, and motion sensors that allow users to experience a 360-degree perspective, hear sounds, and interact with virtual objects **(Amanda, Hotimin, & Mulhendra, 2024; Hamad & Jia, 2022; Kouijzer, Kip, Bouman, & Kelders, 2023).** With its ability to deliver realistic simulations, VR has become one of the most prominent innovations in modern education, including the teaching of Islamic history. Learning Islamic history often faces challenges in terms

of engaging presentation. Conventional methods, such as lectures and reading textbooks, tend to leave students passive and make it difficult to visualize events that occurred in the past. Events such as the life of the Prophet Muhammad in Mecca, the Hijrah to Medina, and the glory of the Abbasid Dynasty are important topics, but their presentations are often abstract, making them difficult for students to grasp in depth. This is where VR comes in as an innovative solution, as it allows students to "experience" these events firsthand in the form of interactive and detailed 3D simulations **(Vallance & Towndrow, 2022)**.

Through VR technology, students can be invited to explore the Kaaba during pre-Islamic times, experience the atmosphere of the Ukaz market, or virtually witness the Bai'at Aqabah ceremony. They can also take an interactive tour of Baghdad during the Islamic Golden Age or observe the architecture of Andalusian palaces. All of this provides a far more engaging learning experience than simply reading descriptions in a textbook. In this way, learning Islamic history is no longer limited to static text and images, but becomes an immersive experience that activates students' senses of sight and hearing, resulting in deeper understanding. The advantages of VR over conventional methods are clear. First, VR can increase student engagement and motivation. Students who typically get bored easily when listening to lectures will feel challenged and excited when given the opportunity to use modern technology in their learning. Second, VR provides a rich visual experience. Complex historical events can be visualized in detail, making it easier for students to understand the chronology and context of events. Third, VR fosters contextual understanding. Students not only memorize historical facts but also see the social, political, and cultural conditions of a particular period. For example, when studying the Hijrah, students can understand the travel route from Mecca to Medina as well as the geographical conditions faced by the Prophet and his companions **(Jati, 2015; Newman, Gatersleben, Wyles, & Ratcliffe, 2022; Puji & Supriyanti, 2025).**

In addition to providing a realistic experience, VR also aligns with modern educational theories, such as constructivism and experiential learning. Constructivism theory states that knowledge is constructed by students through direct experience, not simply transferred from teacher to student. In this context, VR provides students with the opportunity to construct their own understanding through exploration of virtual environments. They become not only listeners but also active participants in the learning process. Meanwhile, Kolb's experiential learning theory emphasizes the importance of learning through experience. Learning processes that involve real-life experiences are more easily remembered and understood by students **(Lege & Bonner, 2020).** VR makes this possible by creating a learning experience that's close to reality. Students can "feel" the historical atmosphere, interact with virtual environments, and experience it firsthand, even if only in the digital world. This has a significant impact on student retention and engagement, compared to learning based solely on lectures or reading books.

Furthermore, VR supports the development of 21st-century skills, such as critical thinking, creativity, and digital literacy. When students use VR to study Islamic history, they not only understand the content but also learn how to utilize technology to acquire knowledge. This is crucial given the challenges of globalization, which demand mastery of information technology in all fields, including religious education. VR's potential in learning Islamic history can also be seen in its ability to accommodate various learning styles. Students with visual and kinesthetic learning styles will benefit greatly because VR presents visual simulations that can be explored interactively. Students with auditory learning styles can also enjoy the experience of hearing

historical narratives through audio accompanying the visualizations. In other words, VR enables a more inclusive and individualized learning approach.

However, the application of VR in Islamic history learning must still adhere to ethical values and Islamic teachings. The content displayed must comply with Sharia principles, not depict anything contrary to Islamic beliefs, and still instill moral values. Teachers play a crucial role in guiding the use of VR so that it becomes more than just entertainment, but also a beneficial educational tool. From this description, it can be concluded that VR has great potential to revolutionize Islamic history learning. This technology can transform the learning process from passive to active, from abstract to concrete, and from boring to enjoyable. By combining the principles of interactivity, visualization, and hands-on experience, VR can be an effective tool for enhancing student understanding, motivation, and engagement in learning Islamic history. If properly integrated into the curriculum and supported by competent teachers, VR can become a significant innovation in Islamic religious education in the digital era.

Implementation of Virtual Reality in Teaching Islamic History in Secondary Schools

The application of Virtual Reality (VR) in teaching Islamic history in secondary schools is a learning innovation aimed at addressing student boredom with conventional methods. Implementing VR in the classroom involves not only the use of technological devices but also thorough pedagogical planning to align with the Islamic Cultural History (ISKI) curriculum. This process encompasses three main stages: preparation, implementation, and teacher management of the learning. The first stage in VR implementation is the preparation of learning devices and content. The devices used typically include a VR headset, a compatible smartphone, and an educational app containing Islamic history content. Teachers collaborate with the school to ensure sufficient devices are available so that all students can participate **(Emmelkamp & Meyerbröker, 2021).** If the number of devices is limited, teachers can set up a rotation system or create study groups.

In addition to hardware, teachers must also select relevant historical content. This content can take the form of VR-based applications featuring historical sites, reconstructions of important events, or virtual tours of locations of historical significance in Islam. For example, content depicting the Kaaba in pre-Islamic times, the atmosphere of the Ukaz market, the events of the Hijrah, and the glory of Islamic civilization in Baghdad during the Abbasid Dynasty. The content selection must be aligned with the Core Competencies (KD) in the SKI curriculum to achieve learning objectives. Once the content is selected, teachers develop learning scenarios that integrate VR with an interactive approach. These scenarios include activity steps ranging from introduction, VR exploration, discussion, and reflection. For example, teachers begin by explaining the learning objectives, then provide instructions on how to use the VR headset, and then guide students through a virtual exploration of the historical site. During the implementation phase, teachers begin with student orientation to the use of VR. This orientation is important so students understand how to operate the device and utilize its available features **(Budiman, 2017; Fadhilah H.M, Rivai, & Syamsul, 2023).** The teacher also provides safety guidance, such as how to hold the headset correctly and adjust the sitting position for comfort.

After orientation, teachers invite students to enter a virtual simulation. For example, in a lesson on early Islamic history, students "visit" the Kaaba in Mecca, see the city during the pre-Islamic period, and listen to narratives about important events such as the revelation of the first revelation. On the topic of the development of Islamic civilization, students can take a virtual

tour of Baghdad during the Abbasid period, explore the Baitul Hikmah library, and observe the city's magnificent architecture. Interactive methods such as guided virtual tours are used to provide direction during the exploration. Teachers guide students with reflective questions, such as: “How were conditions in Mecca different during the pre-Islamic period and after the arrival of Islam?” or “What was the role of the Baitul Hikmah in the development of science during the Abbasid period?” These questions encourage students to think critically and connect visual experiences with the material being studied.

In addition to individual exploration, teachers can add collaborative activities, such as group discussions, after the VR session. Students are asked to discuss their findings, for example, on the factors contributing to the glory of Islamic civilization, and then present their findings to the class. In this way, VR serves not only as a visual medium but also as a catalyst for dialogue and active learning. In implementing VR, the teacher's role is not merely that of a lecturer, but rather a facilitator who guides the learning process. Teachers ensure that the technology integration is effective and does not disrupt student focus. Teachers must control the atmosphere to prevent students from becoming too engrossed in the entertainment aspect of VR and forgetting the learning objectives. Therefore, teachers need to provide clear instructions before the session begins, monitor student interactions during the exploration, and emphasize the connection between the VR experience and Islamic values **(Hamad & Jia, 2022).** Furthermore, teachers are responsible for maintaining the religious context of the learning. For example, as students explore the city of Baghdad, teachers explain the scientific values developed by Muslims at that time and their relevance to modern life. In this way, VR not only presents historical visualizations but also instills moral and spiritual messages.

One example of VR implementation is when a teacher teaches material about the Hijrah event. The teacher prepares a VR application that visualizes the Prophet Muhammad's journey from Mecca to Medina. Students are invited to "see" difficult geographical conditions, such as deserts and mountains, while listening to a narrative about the Prophet's strategy to evade the pursuit of the Quraysh. After the VR session, the teacher holds a discussion about the lessons learned from the Hijrah event, such as the steadfastness of faith and the importance of planning. Another example is a virtual tour of Andalusia during the golden age of Islam. Students can observe the architectural beauty of the Alhambra, hear explanations about the contributions of Muslim scientists in Europe, and understand how the value of tolerance was applied during that time. This experience provides a more contextual understanding than simply reading a book or viewing static images. The implementation of VR in teaching Islamic history in secondary schools brings significant changes to the learning process. With careful planning, VR integration can enliven the classroom atmosphere, increase student motivation, and strengthen student understanding of the material. However, the success of this implementation depends on teacher readiness, the availability of devices, and the ability to connect technology with Islamic values. If managed well, VR has the potential to be one of the most effective innovations for modernizing Islamic history learning in the digital era.

Implications of Using Virtual Reality in Learning Islamic History

The application of Virtual Reality (VR) in Islamic history learning has significantly impacted the quality of the teaching and learning process, particularly in terms of motivation, student engagement, and understanding of the material. VR provides an immersive learning experience, allowing students not only to hear or read but also to experience and see directly simulated

historical events in a virtual environment. This innovation ushers in a new paradigm in Islamic education, where technology becomes a means to bring students closer to material previously considered abstract and difficult to visualize **(Kouijzer et al., 2023; Syahrudin & Gunawan, 2025).**

One of the most tangible impacts of VR is increased student motivation. Conventional methods such as lectures and reading textbooks often discourage students because learning feels monotonous. In contrast, VR offers a more engaging, visual, and interactive experience. When students can "visit" the Kaaba in pre-Islamic times, explore Baghdad during the Abbasid era, or observe the magnificent architecture of the Alhambra in Andalusia, they feel directly involved. This sparks curiosity and a greater enthusiasm for learning. VR makes it easier for students to understand complex historical events by presenting them in 3D visuals. For example, understanding the route of the Prophet Muhammad's Hijrah (migration) from Mecca to Medina becomes clearer when students can see the desert landscape, the cave of Thawr, and the path taken. This experience not only aids comprehension but also improves long-term memory. Educational research shows that strong visual experiences are more memorable than purely textual information. With VR, students can better recall details of events, their chronological order, and their socio-cultural context **(Susanti, Jayadi, Hidayati, Riyanto, & Kiswardianta, 2023).**

VR encourages students' active engagement in learning. They become not just listeners but also active participants, exploring the virtual environment, responding to narratives, and interacting with simulations. Teachers can utilize this feature to create experiential discussions, for example, asking students to share their impressions after "visiting" the city of Cordoba during the Islamic era. This activity makes the learning process more lively and based on real experiences. Despite its many advantages, the implementation of VR is not without several challenges. First, limited devices are a major obstacle. Not all schools have VR headsets and supporting devices due to their relatively high cost. This tends to limit VR implementation to schools with adequate technological support. Second, there is a lack of teacher training in utilizing VR **(AlGerafi, Zhou, Oubibi, & Wijaya, 2023; Fadhilah H.M et al., 2023; Supriyanti, Kurniawati, & Susanto, 2025).** This technology requires new skills that most educators, especially religious teachers accustomed to traditional methods, have not yet mastered. Without training, the use of VR risks being ineffective or even disrupting the learning process. Third, there is the potential for distraction. The use of VR that overemphasizes entertainment can lead students to focus more on visual pleasure than on understanding the material. Teachers must be able to maintain a balance between exploring technology and achieving learning objectives **(Susanto, Rohmah, Hidayanti, & Sugiyar, 2023; Susanto, Widodo, & Kolis, 2023).**

Fourth, the cost of content procurement. High-quality VR content, especially that aligned with the Islamic History curriculum, is still limited and requires development costs. Without the availability of relevant content, VR utilization will be less than optimal. The use of VR in Islamic history learning has major implications for the future of Islamic education. In the long term, VR has the potential to become an integral part of technology-based learning systems that emphasize contextual learning experiences. Some innovation opportunities that can be developed include: The government and technology developers can collaborate to create VR content aligned with the Islamic History curriculum. For example, creating VR modules on the history of the Prophet's preaching, the development of Islamic civilization, or the contributions of Muslim scientists. With curriculum-aligned content, VR can become a standardized learning

medium. VR can be combined with a Learning Management System (LMS) or e-learning applications, so students can access VR experiences at home using simple devices such as mobile phones and cardboard VR. This integration supports distance learning and blended learning, which are increasingly relevant in the digital age.

Teacher training is crucial to ensure that VR usage is not only technical but also pedagogical. Teachers need to understand how to link virtual experiences with reflections on Islamic values, so that learning remains meaningful and oriented toward character building. Schools can collaborate with Islamic boarding schools (pesantren), madrasahs (Islamic schools), and other Islamic educational institutions to develop VR content based on local culture and linked to Islamic history. This not only enriches learning resources but also strengthens Islamic and national identity. Overall, the use of VR in Islamic history learning has had a significant positive impact on student motivation, understanding, and engagement. However, challenges such as limited devices, lack of teacher training, and potential distractions must be addressed through appropriate strategies. With the support of technology, policies, and curriculum-based content development, VR has the potential to become an innovative strategy that strengthens Islamic Religious Education (PAI) learning in the digital era, while making Islamic history more vivid, contextual, and meaningful for today's generation.

4. CONCLUSION

The application of Virtual Reality (VR) in Islamic history learning at the secondary school level has had a significant positive impact on student motivation, understanding of the material, and engagement. This technology is capable of delivering an immersive and interactive learning experience, enabling students to understand Islamic historical events contextually and deeply. VR not only addresses the challenges of conventional learning, which tends to be monotonous, but also aligns with the demands of the digital era, which emphasizes technological literacy and experiential learning. However, the implementation of VR faces several obstacles, such as limited devices, a lack of teacher training, and the cost of developing curriculum-aligned content. Therefore, VR integration requires support from various parties for effective and sustainable implementation. Further research is recommended to examine the application of VR in Islamic history learning with a broader scope, both in terms of population and educational level. Comparative studies between VR-based learning and conventional methods are also needed to quantitatively measure effectiveness. Furthermore, future research could focus on developing VR content that aligns with the national curriculum and instills Islamic educational values. Studies are also needed on teacher training strategies for utilizing VR pedagogically, so that this technology is not merely an entertainment tool but truly supports the achievement of learning objectives.

REFERENCES

Akbar, A., & Barni, M. (2022). Pendidikan Islam Multi, Inter dan Transdisiplin (Tinjauan Sejarah). *Tarbiyah Islamiyah: Jurnal Ilmiah Pendidikan Agama Islam*, *12*(1), 15–28. https://doi.org/10.18592/jt

Al-Ansi, A. M., Jaboob, M., Garad, A., & Al-Ansi, A. (2023). Analyzing augmented reality (AR) and virtual reality (VR) recent development in education. *Social Sciences and Humanities Open*, *8*(1), 100532. https://doi.org/10.1016/j.ssaho.2023.100532

AlGerafi, M. A. M., Zhou, Y., Oubibi, M., & Wijaya, T. T. (2023). Unlocking the Potential: A

Comprehensive Evaluation of Augmented Reality and Virtual Reality in Education. *Electronics (Switzerland)*, *12*(18). https://doi.org/10.3390/electronics12183953

Amanda, S., Hotimin, H., & Mulhendra, M. (2024). Learning Mahaarah Al-Qiraa'ah Using Hijaiyyah Card Media in Islamic Elementary Schools. *Jurnal Indonesia Sosial Teknologi*, *5*(4), 1793–1797. https://doi.org/10.59141/jist.v5i4.1017

Budiman, H. (2017). Peran Teknologi Informasi Dan Komunikasi Dalam Pendidikan. *Al-Tadzkiyyah: Jurnal Pendidikan Islam*, *8*(1), 31. https://doi.org/10.24042/atjpi.v8i1.2095

Creswell, J. W. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks: CA: SAGE Publications.

Emmelkamp, P. M. G., & Meyerbröker, K. (2021). Virtual Reality Therapy in Mental Health. *Annual Review of Clinical Psychology*, *17*, 495–519. https://doi.org/10.1146/annurev-clinpsy-081219-115923

Fadhilah H.M, N., Rivai, A. T. O., & Syamsul, S. (2023). Development of Interactive Learning Media Based on Applications Articulate Storyline 3 Human Coordination System Material. *JURNAL PAJAR (Pendidikan Dan Pengajaran)*, *7*(3), 658. https://doi.org/10.33578/pjr.v7i3.9437

Hamad, A., & Jia, B. (2022). How Virtual Reality Technology Has Changed Our Lives: An Overview of the Current and Potential Applications and Limitations. *International Journal of Environmental Research and Public Health*, *19*(18). https://doi.org/10.3390/ijerph191811278

Huberman, A. M., & Jhonny, S. (2014). *Qualitative Data Analysis a Methods Sourcebook*. America: Arizona State University.

Jati, W. R. (2015). Kesalehan Sosial Sebagai Ritual Kelas menengah Muslim. *Ibda' Jurnal Kebudayaan Islam*, *13*(2), 336–349. https://doi.org/https://doi.org/10.24090/ibda.v13i2.667

Kavanagh, S., Luxton-Reilly, A., Wuensche, B., & Plimmer, B. (2017). A systematic review of Virtual Reality in education. *Themes in Science & Technology Education*, *10*(2), 85–119.

Kouijzer, M. M. T. E., Kip, H., Bouman, Y. H. A., & Kelders, S. M. (2023). Implementation of virtual reality in healthcare: a scoping review on the implementation process of virtual reality in various healthcare settings. *Implementation Science Communications*, *4*(1), 1–29. https://doi.org/10.1186/s43058-023-00442-2

Lege, R., & Bonner, E. (2020). Virtual reality in education: The promise, progress, and challenge. *JALT CALL Journal*, *16*(3), 167–180. https://doi.org/10.29140/jaltcall.v16n3.388

Moh. Teguh Prasetyo. (2023). Islam Dan Transformasi Budaya Lokal Di Indonesia. *Batuthah: Jurnal Sejarah Padaban Islam*, *2*(2), 150–162. https://doi.org/10.38073/batuthah.v2i2.1107

Newman, M., Gatersleben, B., Wyles, K. J., & Ratcliffe, E. (2022). The use of virtual reality in environment experiences and the importance of realism. *Journal of Environmental Psychology*, *79*. https://doi.org/10.1016/j.jenvp.2021.101733

Paduli, G. (2025). *Sustainable Well-Being & Clinical Resilience: Psikologi Positif untuk Krisis Mental*. PT. Star Digital Publishing, Yogyakarta-Indonesia.

Puji, F., & Supriyanti. (2025). The Use of Augmented Reality in Teaching Islamic History to Millennial

Students. *JISEI: Journal of Islamic Studies and Educational Innovation*, *01*(02).

Purba, N., Yahya, M., & Nurbaiti, M. K. (2021). Revolusi Industri 4.0 : Peran Teknologi dalam Eksistensi Penguasaan Bisnis dan Implementasinya. *Jurnal Perilaku Dan Strategi Bisnis Vol.9*, *9*(2), 91–98.

Rukajat, A. (2018). *Pendekatan Penelitian Kualitatif*. Yogyakarta: CV. Budi Utama.

Sugiyono. (2015). *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, Dan R&D)*. Bandung: Alfabeta.

Supriyanti, Kurniawati, D., & Susanto, R. (2025). Analysis of the Minister of Education ' s Curriculum Policy in the 2019-2024 Vs . 2024-2029 Era. *QALAMUNA: Jurnal Pendidikan, Sosial, Dan Agama*, *17*(1), 741–754. https://doi.org/10.37680/qalamuna.v17i1.7127

Susanti, P., Jayadi, P., Hidayati, N. R., Riyanto, S., & Kiswardianta, R. B. (2023). Pelatihan Pembuatan Google Sites Sebagai Media Pembelajaran Berbasis Website Bagi Guru Smk Cendekia Madiun. *Jurnal Terapan Abdimas*, *8*(1), 141. https://doi.org/10.25273/jta.v8i1.14022

Susanto, R., Rohmah, W., Hidayanti, S. N., & Sugiyar, S. (2023). Interreligious Harmonization (Analytic Study of Kalicinta Village, Kotabumi, Lampung). *Jurnal Kodifikasia: Jurnal Penelitian Keagamaan San Sosial-Budaya*, *17*(1). https://doi.org/http://dx.doi.org/10.21154/kodifikasia.v17i1.5729

Susanto, R., Widodo, W., & Kolis, N. (2023). The Implication of the Sima'an Ahad Pahing on the Qur'an Memorization at PPTQ Al-Hasan Ponorogo. *Jurnal Kebudayaan*, *18*(2), 125–132. https://doi.org/10.37680/adabiya.v18i2.2396

Syahrudin, & Gunawan, A. (2025). Construction of Islamic Identity of Students in the Digital Era : A Case Study of the Ibnurusyd Campus Da ' wah Community. *JISEI: Journal of Islamic Studies and Educational Innovation*, *01*(02).

Vallance, M., & Towndrow, P. A. (2022). Perspective: Narrative Storyliving in Virtual Reality Design. *Frontiers in Virtual Reality*, *3*(March), 1–5. https://doi.org/10.3389/frvir.2022.779148

Wagianto, R. (2023). Tradisi Perang Bangkat Dalam Perkawinan Adat Masyarakat Osing Banyuwangi Dalam Perspektif Sosiologi Hukum Islam. *Asy-Syari`ah: Jurnal Hukum Islam*, *9*(2), 234–249.

Yahuda, R. D., Susanto, R., Widodo, W., Kolis, N., & Abdillah, B. (2023). Musafahah Method Transformation on Learning Qiraah Sab'ah in PPTQ Al-Hasan Ponorogo. *Masdar Jurnal Studi Al-Qur'an & Hadis*, *5*(2). https://doi.org/https://doi.org/10.15548/mashdar.v5i2.7293

Zhan, T., Yin, K., Xiong, J., He, Z., & Wu, S. T. (2020). Augmented Reality and Virtual Reality Displays: Perspectives and Challenges. *IScience*, *23*(8), 101397. https://doi.org/10.1016/j.isci.2020.101397