

Analysis of the Effectiveness of Virtual Reality as an Innovative Media in Learning Islamic History in Higher Education: A Literature Review

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Abstract

This study aims to assess the effectiveness of Virtual Reality (VR) as an innovative learning medium in Islamic History courses at universities. The main issue raised is the low level of student interest and understanding due to conventional teaching methods that tend to be abstract. This study uses a qualitative research method with a literature study approach, examining reputable journals and academic books published between 2020 and 2025 that are relevant to the use of VR in education. The results show that VR can improve understanding of historical concepts, motivate students, and encourage active engagement through immersive learning experiences. Previous studies also confirm that VR helps students understand historical contexts more realistically, strengthens historical thinking skills, and improves information retention. Additionally, this technology supports andragogical learning and student-centered approaches. This study demonstrates that VR has great potential as a strategic medium for deepening the learning of Islamic History.

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1. INTRODUCTION

The current development of digital technology has brought about massive changes in education, particularly in Islamic higher education. One increasingly popular technological innovation is Virtual Reality (VR), which provides a truly immersive learning experience through three-dimensional virtual environments. Specifically in the study of Islamic history, the use of VR is highly suitable because it allows students to see historical events, locations, and artifacts in a more realistic and lifelike way, significantly different from traditional lectures or reading texts. The main challenge in teaching history to date is its abstract nature, reliance on memorization, and limited opportunities for students to experience it firsthand. Therefore, VR has emerged as an innovative tool that can connect theoretical concepts with real-life learning experiences.

Previous research studies have shown that VR has a significant impact on the quality of history learning. Baroroh and Zulfitria found that VR increased students' interest and understanding of Islamic cultural history because the visualizations presented made them feel as if they were directly involved in the events being studied.[1]. Almada et al. also proved that VR can improve conceptual understanding and historical thinking, because students not only see images, but can also explore historical sites in the form of virtual simulations.[2]. Another study by Fira et al. stated that VR can increase learning

effectiveness and significantly influence student motivation and concentration. This third study shows that VR has been proven to have a positive impact in various learning contexts, including Islamic history.[3]

Although research on the use of VR in education is quite extensive, studies specifically examining the effectiveness of VR in teaching Islamic history in higher education are still very limited. Most studies focus solely on secondary school or general education levels, rather than the context of Islamic higher education, which has distinct characteristics, needs, and learning objectives. Therefore, this study offers a novel, comprehensive scientific analysis that integrates the findings of several recent studies to examine the effectiveness of VR when applied to teaching Islamic history in higher education.

This phenomenon serves as the primary foundation for this research, which focuses on evaluating the effectiveness of Virtual Reality as an innovative tool in the learning process of Islamic History in higher education. This research was conducted through a literature review that reviewed fundamental concepts, previous research findings, and the consequences of implementing VR in Islamic history learning. This approach aims to provide a comprehensive overview of how VR can function not only as a visual support medium but also as an instrument for learning change that aligns with Islamic educational values.

The main objective of this study is to describe the concept and theoretical basis for using VR in Islamic history learning, analyze the results of previous research related to the application of VR in higher education, and examine the effectiveness and implications of its use in an Islamic context. Therefore, this study is not only oriented on the technological aspect, but also on the pedagogical and spiritual dimensions, which are the main characteristics of Islamic education.

Based on this, the results of this study are expected to enrich academic studies on the integration of digital technology in the learning of the Islamic religion and history. Practically, the results can serve as a reference for lecturers, curriculum developers, and Islamic higher education institutions in developing technology-based learning models that are innovative, effective, and relevant to the needs of today's digital generation. Through the appropriate application of VR, learning about Islamic history is expected to become more lively, interactive, and meaningful, not only enhancing understanding of the past but also instilling Islamic values relevant to life today and the future.

2. RESEARCH METHODS

This research employs a qualitative approach, utilizing a literature review approach. This method was chosen because the focus of the research is not on collecting direct data from the field, but rather on an in-depth analysis of various relevant sources regarding the effectiveness of Virtual Reality (VR) as an innovative medium for teaching Islamic History in higher education. Through this approach, we seek to understand the phenomenon of VR technology use in the context of Islamic education based on the results of previous research, learning theories, and conceptual ideas developed in the scientific literature.

The data in this study comes from secondary sources, namely scientific literature such as reputable journals and academic books covering related topics. The literature selection criteria include:

- a. Published in the 2020–2025 timeframe to be relevant to the latest developments in educational technology.
- b. Has a focus on studying Virtual Reality in the context of learning

- c. Contains aspects of effectiveness, learning motivation, and implementation of educational technology in higher education or VR learning innovations.
- d. Relevant to the context of Islamic education or history learning.

To ensure the validity of the data used, this study applied the principles of source triangulation and literature credibility evaluation. Triangulation was performed by comparing various research findings on similar themes from different sources. Credibility evaluation was conducted by checking the journal's reputation, year of publication, and the content's relevance to the research objectives. This approach ensures that all data and conclusions generated are based on valid and up-to-date scientific references.

3. RESEARCH RESULTS AND DISCUSSION

3.1. Research result

Research shows that the use of Virtual Reality (VR) in learning helps students better understand the material and makes them more engaged and active in their learning. In Islamic history lessons, VR allows students to experience historical events firsthand, something that is usually only possible through reading books or listening to lectures. According to the author, several studies that are similar to the current literature review are:

No	Author Name	Title & Description	Research result
1	Baroroh and Zulfitria	Virtual Reality (VR) Innovation as an Effective Medium in History Learning	The results of the research show that VR-based learning media is considered an alternative that can be
		Islamic Culture, Journal of Islamic Religious Education Vol. 03; No. 02; 2024; 235-238	provides new and more engaging learning experiences for students. VR can display engaging video or image simulations, and the duration can be adjusted to suit the theme and learning needs, including learning the history of Islamic culture for students.
2	Yoga Alvin Almada, Dewi Puspita, and Agus Susilo	Implementation of Virtual Reality-Based History Learning Technology and Media in Improving Students' Conceptual Understanding, Danadyaksa Historica 4 (2) (2024): 67-72	The research findings suggest that the use of VR in history learning shares several similarities. This technology not only allows students to view images or listen to explanations, but also allows them to "visit" historical sites and experience the social and cultural environment of the time. This method allows students to gain a deeper understanding of historical events, experience the feelings of the figures involved, and enhance their historical thinking skills,

			conceptual understanding, and their enthusiasm for learning.
3	Muhammad Naufal Azmi, Hamsi Mansur, and Agus Hadi Utama	The Potential of Using Virtual Reality as a Learning Medium in the Digital Era, Journal of Dimensions of Education and Learning, Vol 12, Special Issue No 1 2024, pp. 211 – 226.	Research shows that VR provides a highly engaging and immersive experience, allowing students to feel like they are in a virtual environment. This can enhance their engagement and deepen their understanding of the subject matter. This technology creates a simulated environment that closely resembles the real world, providing realistic visual, auditory, and movement experiences, while also increasing focus and enthusiasm. student learning.

From these three studies, it can be concluded that virtual reality is not just a visual aid but also an innovative learning medium. The results show that the use of VR is effective in significantly increasing students' enthusiasm for learning, understanding of concepts, and learning experiences, particularly in Islamic history lessons at various levels of education, particularly in higher education.

VR provides a realistic and interactive learning experience, allowing students to virtually explore Islamic historical events and sites. With VR innovations in history learning, it can be concluded that VR has great potential to improve the quality of Islamic history instruction in higher education, making it more engaging, relevant, and in line with developments in digital technology in modern Islamic education.

3.2. Discussion

a. Basic Concepts of Virtual Reality in Learning

Virtual Reality (VR) is a technology that creates a three-dimensional virtual world, allowing users to feel as if they are actually there. Using devices such as VR headsets and motion sensors, users can see, hear, and even interact with digital objects that appear incredibly realistic. According to Azmi et al., VR is a

learning medium that combines images, sound, and movement to create an engaging and realistic learning experience.[4]

This technology makes students more active because they learn through direct experience, not just hearing or reading. In education, VR is used as an interactive learning medium that helps teachers explain material that is difficult to understand only through text or images. With VR, students can simulate or explore an object, place, or event without the limitations of space and time. As explained by Taufik et al., VR makes learning more enjoyable and makes it easier for students to understand abstract concepts because they can see and experience the learning process directly.[5]

In the context of Islamic history learning, VR plays a crucial role in helping students understand key events and figures in Islamic history more vividly. For example, students can take a virtual visit to Mecca and Medina during the Prophet Muhammad's reign, witness a reconstruction of the Hijrah (Hijrah), or explore Islamic civilization in Baghdad and Andalusia.

In this way, students not only learn historical facts but also experience the atmosphere and values of the Muslim struggle. According to Hendri and the executive, the use of VR technology in the learning process can increase enthusiasm for learning because it provides a direct experience that is difficult to forget. Overall, the use of VR in learning, especially in Islamic History courses, makes the learning process more interesting, real, and meaningful. This technology helps students understand history not only as a story from the past, but also as an experience that can be experienced and learned from.[6]

b. Review of the Results of Several Previous Studies

Several previous studies have shown that the use of Virtual Reality (VR) in education continues to grow, particularly in efforts to make learning more interactive, realistic, and engaging for students. Numerous studies have demonstrated that this technology has a positive impact on students' conceptual understanding, enthusiasm for learning, and learning experiences.

Research conducted by Baroroh et al. shows that the use of VR in learning Islamic Cultural History can create a more lively and meaningful learning atmosphere. In the study entitled "Virtual Reality (VR) Innovation as an Effective Medium in Learning Islamic Cultural History," it is explained that students can better understand the historical context because they feel as if they are "living" at important places and events. This makes VR not only a visual aid but also a medium that enriches the immersive learning experience, thereby increasing students' interest and absorption of historical material. [1]

These findings are in line with research conducted by Almada et al., who found that the use of VR was able to improve understanding, conceptual, engagement, and participation of students in history learning. Students who use VR demonstrate a better understanding of the chronology of events, social context, and Islamic historical values compared to conventional learning methods. In addition, VR increases learning motivation because the process resembles the experience of exploring the real world [2]

Fira et al.'s research supports these findings. Although not focused on Islamic history, VR has been shown to improve learning effectiveness in higher education, including increased engagement, concentration, and long-term

retention of the material. As many as 76% of students stated they were more interested in learning using VR than traditional lecture methods [3].

In addition to the third study, the results of research conducted by Supriyadi and his team further confirm how effective VR is for learning Islamic history. In their article entitled "Virtual Reality as an Innovative Media in Learning the History of Islamic Civilization: Enhancing Interactive Learning Experiences in Multicultural Classrooms," it is explained that VR "can increase student motivation and participation by creating a more lively and immersive learning experience" and help students gain a deeper cognitive and emotional understanding of the cultural and moral values in the history of Islamic civilization. In fact, VR allows students to "experience firsthand the invaluable experience of Islamic cultural heritage" [7].

c. Analysis of Effectiveness and Its Implications

Based on research findings, the use of Virtual Reality (VR) technology in Islamic history instruction has been shown to have a significant positive impact on student learning and achievement in Islamic higher education settings. The technology's success is evident in improved understanding of the material, increased enthusiasm for learning, and the provision of deeper and more meaningful learning experiences.

The results of research conducted by Baroroh et al. showed that students became more active and enthusiastic because VR presented visual images similar to historical reality.[1] This supports the results of research by Almada et al., which emphasized that VR not only improves conceptual understanding but also builds students' intrinsic motivation by providing the experience of "visiting directly" historical Islamic sites.[2]

Further research conducted by Readi confirms that VR can strengthen the principles of student-centered learning in Islamic studies in higher education, where students learn through active exploration and reflection. This technology enables lecturers to act as facilitators, not just transmitters of information, in line with the principles of andragogy in Islamic higher education.[8]

These findings align with Astari's research, which explores the application of VR as an innovative learning tool in Indonesia. She found that VR has significant potential to increase participant activity and participation, despite challenges such as limited devices and internet access. Astari emphasized the need for dissemination and training on VR among educators to ensure optimal utilization.[9]

In the context of Islamic education, these results reinforce Hastuty's theory that digital literacy and technological adaptability are new demands for educators in the era of digital transformation. Mastering technologies like VR is not just about media innovation, but also part of an effort to improve the quality of education. students' knowledge and spirituality through contextual and meaningful learning experiences.[10]

For lecturers, the application of VR in Islamic history teaching provides an opportunity to design more creative, interactive media that align with 21st-century learning principles. For students, VR makes the learning process more enjoyable and deepens their understanding of historical values and the exemplary role of Islamic figures.

Practically, VR applications can be used to trace the Prophet Muhammad's journey from Hijrah (migration), explore the legacy of Islamic civilization in Andalusia, or understand the development of Islamic preaching in the Indonesian archipelago. With learning experiences like these, students learn history not only cognitively but also affectively and spiritually.

Based on the analysis of various literature, it can be concluded that VR is highly effective as an innovative medium for teaching Islamic history in higher education. In addition to improving learning outcomes, this technology has implications for the development of digital-based Islamic curricula and learning models that are more participatory, collaborative, and relevant to the needs of the industry 5.0 era.

4. CONCLUSION

Based on the various research findings described above, it appears that Virtual Reality (VR) is effective in enhancing students' understanding, motivation, and learning experience in Islamic history lessons at the tertiary level. VR is capable of displaying immersive visualizations, making historical material more concrete, engaging, and understandable. In this way, VR helps overcome the limitations of conventional learning methods, which are typically abstract and less engaging.

In addition to improving the quality of learning processes and outcomes, the use of VR also has important implications for developing learning models in Islamic higher education. This technology has the potential to transform previously lecturer-centered learning patterns into more participatory, exploratory, and experience-based ones. This aligns with the principles of andragogy and digital literacy, which are essential for higher education in the era of digital transformation.

Future research is expected to address the development of VR content appropriate to the Islamic history curriculum. Furthermore, direct experiments are needed to implement VR in the classroom, particularly in Islamic history instruction. Research should also include an analysis of lecturer readiness, existing infrastructure, and technology, as well as strategies for enhancing the use of VR in history instruction for optimal and sustainable implementation.

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6. BIBLIOGRAPHY

- [1] R. N. Baroroh and Zulfitria, "Inovasi Virtual Reality (VR) sebagai Media yang Efektif pada Pembelajaran Sejarah Kebudayaan Islam," *J. Pendidik. Agama Islam*, vol. 03, no. 02, pp. 235–238, 2024, [Online]. Available: <https://journal.uniga.ac.id/index.php/JPAI/article/download/4127/2028/12487>
- [2] Y. A. Almada, D. Puspita, and A. Susilo, "PENERAPAN TEKNOLOGI DAN MEDIA PEMBELAJARAN SEJARAH BERBASIS VIRTUAL REALITY DALAM PENINGKATAN PEMAHAMAN KONSEPTUAL SISWA," *Danadyaksa Hist.*, vol. 04, no.

02, pp. 67–72, 2024, [Online]. Available: <https://ejournal.upi.edu/index.php/danadyaksa/article/download/53302/18204>

[3] M. Fira, Ridwan, and M. R. Fachri, “Penerapan Media Pembelajaran Berbasis Virtual Reality Terhadap Efektifitas Belajar Mahasiswa Pada Mata Kuliah Kesehatan Dan Keselamatan Kerja,” *J. Ilm. Mhs.*, vol. 1, pp. 39–50, 2023.

[4] M. N. Azmi, H. Mansur, and A. H. Utama, “Potensi Pemanfaatan Virtual Reality Sebagai Media Pembelajaran Di Era Digital,” *JDPP J. Dimens. Pendidik. dan Pembelajaran*, vol. 12, no. 1, pp. 211–226, 2024, [Online]. Available: <https://journal.lppmunindra.ac.id/index.php/dimensipendidikan/article/download/15842/pdf>

[5] E. R. A. Society, A. Taufik, A. Muh, A. Saputra, I. Farman, and N. Alamsyah, “PENGENALAN TEKNOLOGI PEMBELAJARAN VIRTUAL REALITY,” vol. 6, no. 1, pp. 1303–1307, 2025.

[6] N. Hendri, Darmansyah, F. Yeni, and J3, “ANALISIS PEMBELAJARAN ; MENUJU PEMBELAJARAN VIRTUAL REALITY BERBASIS PENDEKATAN KONSTRUKTIVIS DAN PENERIMAAN TEKNOLOGI,” *E-Tech*, vol. 08, no. 02, pp. 1–10, 2020, doi: 10.1007/XXXXXX-XX-0000-00.

[7] A. Supriyadi, Y. Mardiana, D. D. Harbi, D. Karsa, L. Nuraeni, and M. Permadi, “Virtual Reality sebagai Media Inovatif dalam Pembelajaran Sejarah Peradaban Islam: Meningkatkan Pengalaman Belajar Interaktif di Kelas Multikultural,” *Educ. Achievement J. Sci. Res.*, vol. 6, no. 2, pp. 806–818, 2025, doi: <https://doi.org/10.51178/jsr.v6i2.2785>.

[8] A. Readi, “ANALISIS DAMPAK PENGGUNAAN TEKNOLOGI VIRTUAL REALITY (VR) DALAM PEMBELAJARAN PENDIDIKAN,” *Benchmarking J. Manaj. Pendidik. Islam*, vol. 7, no. 2, pp. 116–129, 2023, doi: <http://dx.doi.org/10.30821/benchmarking.v7i2.24269>.

[9] T. Astari, “Evaluasi Diseminasi Virtual Reality (VR) sebagai Pembelajaran Inovatif,” *J. Penelit. Pendidik.*, vol. 13, no. 02, pp. 114–120, 2021, doi: 10.21137/jpp.2020.13.2.7.

[10] A. H. Hasyim, *Melek Teknologi Informasi Tren Aplikasi Olah Data dan Artikel Ilmiah Berbasis Digital*, 2nd ed. Parepare: CV. KAAFFAH LEARNING CENTER, 2023.