

ENHANCING STUDENT ENGAGEMENT IN ISLAMIC CULTURAL HISTORY USING ZEP QUIZ AT MA DARUL ULUM WARU, SIDOARJO

Zahro Nur Laili Hanifah

Institut Agama Islam YPBWI Surabaya, Indonesia

zahrolailihanifah@gmail.com

Agus Darmawan

Institut Agama Islam YPBWI Surabaya, Indonesia

agoesd1508@gmail.com

Zaini Tamim AR

Institut Agama Islam YPBWI Surabaya, Indonesia

zainitamim@gmail.com

Abstract:

The rapid development of digital technology has demanded innovation in Islamic Religious Education (PAI), particularly in the subject of Islamic Cultural History (SKI), which is often perceived as monotonous and less engaging, resulting in low student participation. This study aims to analyze the effectiveness of the online educational game Zep Quiz in enhancing students' activeness and understanding of Islamic values at MA Darul Ulum Waru. The research employed a qualitative approach using a case study design. Data were collected through interviews, observations, and documentation involving the SKI teacher, students, the Vice Principal for Curriculum Affairs, and the principal. The findings indicate that the implementation of Zep Quiz created a more interactive, participatory, and enjoyable learning environment. Students' activeness increased through engagement in competitive quiz activities, group discussions, and more enthusiastic responses to the material. In addition to improving cognitive understanding, the use of the educational game facilitated the internalization of values such as perseverance, exemplary conduct, and Islamic spirit. Despite technical challenges, including internet connectivity and limited devices, this innovation is considered relevant to the characteristics of digital-native learners. The author argues that integrating online educational games into PAI instruction represents an effective and contextual pedagogical strategy to enhance learning quality in the digital era.

Keywords: *online educational games, PAI learning innovation, digital era, and Zep Quiz*

Abstrak:

Perkembangan teknologi digital menuntut inovasi pembelajaran Pendidikan Agama Islam (PAI), khususnya pada materi Sejarah Kebudayaan Islam (SKI) yang kerap dianggap monoton dan kurang menarik, sehingga berdampak pada rendahnya keaktifan siswa. Penelitian ini bertujuan untuk menganalisis efektivitas penggunaan game edukasi online *Zep Quiz* dalam meningkatkan keaktifan dan pemahaman nilai-nilai Islam siswa di MA Darul Ulum Waru. Penelitian menggunakan pendekatan kualitatif dengan desain studi kasus. Data diperoleh melalui wawancara, observasi, dan dokumentasi yang melibatkan guru SKI, siswa, Wakil Kepala Madrasah bidang kurikulum, serta kepala madrasah. Hasil penelitian menunjukkan bahwa penerapan *Zep Quiz* mampu menciptakan pembelajaran yang lebih interaktif, partisipatif, dan menyenangkan. Keaktifan siswa meningkat melalui keterlibatan dalam kuis berbasis kompetisi, diskusi kelompok, serta respons yang lebih antusias terhadap materi. Selain meningkatkan pemahaman kognitif, penggunaan game edukasi juga mendukung internalisasi nilai-nilai perjuangan, keteladanan, dan semangat keislaman. Meskipun terdapat kendala teknis seperti jaringan internet dan keterbatasan perangkat, inovasi ini dinilai relevan dengan karakteristik

generasi digital. Penulis berargumen bahwa integrasi game edukasi online dalam pembelajaran PAI merupakan strategi pedagogis yang efektif dan kontekstual untuk meningkatkan kualitas pembelajaran di era digital.

Kata kunci: *game edukasi online, inovasi pembelajaran PAI, era digital dan Zep Quiz*

Introduction

The development of digital technology has brought a new paradigm to the world of education, including within the realm of Islamic Religious Education (PAI). In the era of the industrial revolution 4.0, where students are digital natives, conventional learning approaches that are still teacher-centered are considered less effective in capturing students' interest and attention.¹ This condition demands that teachers innovate by utilizing learning media that align with students' characteristics and daily lives.²

Specifically, the learning of Islamic Cultural History (SKI) at the Madrasah Aliyah level, including at MA Darul Ulum Waru, faces complex challenges. SKI material, which is rich in historical narratives, event chronologies, and names of figures, is often presented textually and monotonously. This has the potential to cause boredom and a decrease in student activity in the learning process. This research distinguishes itself by focusing on innovation in PAI learning through the Zep Quiz educational game media, specifically for SKI material at MA Darul Ulum Waru.

Online educational games have emerged as an innovative solution to address this issue. Unlike one-way learning, educational games offer an interactive, challenging, and enjoyable learning experience. Through mechanisms such as quizzes, levels, and reward systems, games can create a learning environment that motivates students to engage actively.³ A study by Giasta et al. proved that the development of Android-based educational games significantly succeeded in increasing students' interest in learning PAI subjects.⁴

Among the various existing educational game platforms, Zep Quiz offers strategic advantages. This platform allows teachers to create interactive quizzes that can be accessed in real-time by students via their own devices. Features such as live-updating leaderboards, attractive avatars, and various game types (such as MCQ, true/false, and picture guessing) are highly effective for creating a healthy competitive

¹ Esin Mukul and Gülçin Büyüközkan, "Digital Transformation in Education: A Systematic Review of Education 4.0," *Technological Forecasting and Social Change* 194 (2023): 122664, <https://www.sciencedirect.com/science/article/pii/S0040162523003499>.

² Windawati, Ririn, and Henny Dewi Koeswanti. "Pengembangan Game Edukasi Berbasis Android Untuk Meningkatkan Hasil Belajar Siswa Di Sekolah Dasar". *Jurnal Basicedu*, vol. 5, no. 2, Mar. 2021, pp. 1027-38, doi:10.31004/basicedu.v5i2.835.

³ Anuj Rapaka et al., "Revolutionizing Learning – A Journey into Educational Games with Immersive and AI Technologies," *Entertainment Computing* 52 (2025): 100809, <https://www.sciencedirect.com/science/article/pii/S1875952124001770>.

⁴ Diana, L. M., Ana Yuniasti Retno Wulandari, and Alfina Kusuma Nilasari. "Pengembangan Media Pembelajaran Berbasis Game Edukasi Untuk Meningkatkan Motivasi Belajar Siswa Pada Mata Pelajaran Informatika". *Decode: Jurnal Pendidikan Teknologi Informasi*, vol. 5, no. 1, Mar. 2025, pp. 159-68, doi:10.51454/decode.v5i1.1071.

atmosphere and encouraging the active participation of all students without exception. The use of similar media, such as Quizizz, has been proven to improve student learning outcomes in Islamic history material.⁵

Based on the description above, a clear gap is evident between the demands of learning in the digital era and the conventional SKI teaching methods at MA Darul Ulum Waru. This research aims to address this need by testing the effectiveness of Zep Quiz as an online educational game in the specific context of SKI learning. By integrating Zep Quiz, it is hoped that not only will student activity increase, but their understanding of the values of Islamic history can also be embedded more deeply through meaningful and enjoyable learning experiences.

Theoretically, game-based learning through gamification can increase student motivation and participation. Zep Quiz is an interactive learning medium that aligns with constructivist learning principles by placing students at the center of the learning process.

Previous studies have shown that gamification-based learning media effectively improve student motivation, activity, and learning outcomes. However, studies specifically examining the application of Zep Quiz to SKI material at the Madrasah Aliyah level are still very limited, so this research has the opportunity to contribute something new.

This study not only evaluates the effectiveness of increasing student activity but also examines student responses and adaptation to digital innovation in contextual religious learning that is relevant to the demands of the modern era.

Method

This research employs a qualitative research method with a case study approach. The qualitative approach was chosen because it aims to explore in depth the phenomenon of using the Zep Quiz application-based online educational game as an innovation in Islamic Religious Education (PAI) learning, specifically for Islamic Cultural History (SKI) material at MA Darul Ulum Waru. The case study approach enables the researcher to understand the experiences, perceptions, and responses of students and teachers regarding the implementation and impact of using this learning media in a real-world context.

Students' understanding of Islamic values remains diverse and tends to be theoretical, without being balanced by contextual and engaging learning experiences. As a digital generation, students are more familiar with technology and online games; however, this familiarity has not yet been optimally directed toward educational learning activities.

The data obtained from various research sources were then processed and analyzed using qualitative data analysis techniques. The analysis was carried out continuously from the data collection stage until the research was completed, by

⁵ Universitas Muhammadiyah and Journal Cover, "Table Of Contents" 7444 (n.d.): 1–16.

organizing, grouping, and interpreting the data based on relevant categories. The results of this analysis were used to reveal meanings, gain a deep understanding of the phenomena, and answer the research focus that had been set.

All the collected data were then analyzed interactively and continuously using Miles and Huberman's data analysis model, which includes data reduction, data display, and drawing conclusions or verification.⁶ In the data reduction stage, the researchers sorted, simplified, and grouped the data obtained from observations, interviews, and documentation according to the research focus. Data considered relevant to the implementation of the Zep Quiz online educational game and students' activeness in SKI learning were retained, while data unrelated to the research objectives were set aside.

Next, the reduced data is presented in the form of narrative descriptions, tables, or thematic descriptions, making it easier for researchers to understand the relationships between the data and identify patterns that emerge during the research process. This way of presenting data helps researchers identify various findings related to the implementation process of Zep Quiz, students' responses to using this learning media, as well as the supporting and inhibiting factors that affect its execution.

The last stage is drawing conclusions and verification. At this stage, the researcher interprets the meaning of the data presented to gain a deep understanding of the implementation of the online educational game Zep Quiz in increasing student engagement in Islamic Cultural History (SKI) material. The conclusions reached are not set immediately but are continuously verified by rechecking field data, comparing observation results with interviews and documentation, and conducting source and technique triangulation to ensure the validity of the data.

This cyclical and ongoing analysis process allows researchers to continuously reflect on the data collected during the study. In this way, data from various sources can complement and reinforce each other, resulting in research findings that are comprehensive, coherent, credible, and able to accurately depict the actual conditions regarding the use of the Zep Quiz online educational game in learning SKI at MA Darul Ulum Waru.

Data analysis is done by organizing all the data obtained from observations, interviews, and documentation. The collected data is then arranged systematically by grouping it based on themes that are relevant to the research focus. For example, data related to the process of conducting learning using Zep Quiz, the types of student activity during the lessons, and various challenges faced in implementing the learning media. This grouping process aims to make it easier for the researcher to understand the phenomena happening in the field in a more structured way.

The next stage is the data interpretation process. At this stage, the researcher takes a close look at various information obtained from interviews with SKI subject

⁶ Matthew B Miles et al., "F. Analisis Data," *Implementasi Kurikulum Merdeka Di Sekolah* 61 (1996).

teachers and students, observation notes during learning activities, and documents related to the use of Zep Quiz in learning.

The final stage in data analysis is drawing conclusions. Conclusions are made based on the results of the data interpretation that has been done and are linked to relevant concepts and theories.

Results and Discussion

A. The Role of Educational Games in Enhancing Understanding of Islamic Values

The research results indicate that the use of the Zep Quiz online educational game has a positive impact on the learning process of the Islamic Cultural History (SKI) subject.⁷ Based on interviews with the SKI subject teacher, learning before using online educational game media tended to be monotonous and boring.⁸ This had an impact on the low level of student activity, as seen from the initial assessment results which showed minimal student participation in the learning process.⁹

After the implementation of the Zep Quiz online educational game, the classroom atmosphere underwent a significant change.¹⁰ The class became more lively, interactive, and enjoyable. This finding indicates that Zep Quiz is able to present a different learning experience compared to conventional methods.¹¹ The selection of Zep Quiz media was based on pedagogical considerations, namely that it functions not only as an evaluation tool but also as a learning medium capable of reducing learning pressure.¹² The elements of gameplay and competition in answering quizzes encourage students to be more enthusiastic and actively engaged during the learning process.¹³

In its implementation, the teacher applied structured learning steps. The

⁷ Muslimin Muslimin, "Integrating Zep Quiz into IPAS Instruction to Enhance Fourth Grade Students' Critical Thinking Skills," *Journal of Education and Computer Applications* 2, no. 2 (2025): 30–37.

⁸ Adelia Lestarina et al., "The Memory-Game-Enhanced Game-Based Learning Model: How Effective Is It In Strengthening Students' learning Interest, Specifically Their Attention?," *Ilmuna: Jurnal Studi Pendidikan Agama Islam* 7, no. 2 (2025): 1041–1055.

⁹ Mushtaq Hussain et al., "Student Engagement Predictions in an E-learning System and Their Impact on Student Course Assessment Scores," *Computational intelligence and neuroscience* 2018, no. 1 (2018): 6347186.

¹⁰ Ajeng Rahmadania Ariestiara, "The Implementation Of Game-Based Assessment For Learning Through Squigabe In The Merdeka Curriculum," in *International Seminar on Humanity, Education, and Language*, 2025, 309–318.

¹¹ Muhammad Afif and Purwidiyanto Purwidiyanto, "Literature Review: The Effectiveness Of Zep Quiz In Increasing Enthusiasm For Learning Islamic Religious Education," *Jurnal Pendidikan Glasser* 10, no. 1 (2026): 40–51.

¹² Tafrica Dewi Setyaningrum, Handoyo Saputro, and Dinia Risti Apriani, "Implementation of the Team Games Tournament (TGT) Learning Model Assisted by Zep Quiz Media in Science Learning to Improve Students' Learning Motivation in Grade VIII at SMP Muhammadiyah 9 Yogyakarta," in *Proceedings of International Conference on Teacher Profession Education*, vol. 3, 2025, 820–831.

¹³ Kuan-Cheng Lin, Ting-Kuan Wu, and Yu-Bin Wang, "Developing a Web-Based and Competition-Based Quiz Game Environment to Improve Student Motivation," *Journal of Networks* 6, no. 5 (2011): 736.

learning process began with the distribution of Student Worksheets (LKPD), followed by an explanation of the SKI material, and then an assessment was conducted using the Zep Quiz online educational game.¹⁴ Students were divided into groups to measure comprehension abilities, enhance cooperation, and foster discussion among students.¹⁵ This learning pattern aligns with the constructivist approach which emphasizes the active involvement of students in constructing their own knowledge.¹⁶

In terms of student activity, the teacher stated that the majority of students showed high interest in using Zep Quiz.¹⁷ Students appeared more focused, actively answered questions, and showed great enthusiasm when participating in the quizzes.¹⁸ This positive student response confirms that the Zep Quiz online educational game plays an important role in increasing the activity and quality of SKI learning.¹⁹

Based on interviews with the Vice Principal (WAKA) for curriculum affairs, the integration of online educational games into the Islamic Religious Education (PAI) curriculum is a form of the madrasah's adaptation to the demands of the times. The WAKA for curriculum affirmed that learning in the digital era requires the use of media that is relevant to the characteristics of students, so online educational games are seen as media that are not only entertaining but also educational.²⁰

In the planning stage, the use of Zep Quiz has been adjusted to the Learning Outcomes (CP) and objectives of SKI learning. The PAI teacher has prepared learning plans that refer to the Learning Outcomes (CB) and CP, so that the implementation of online educational games remains within the applicable curriculum framework. The implementation of PAI learning utilizing Zep Quiz is designed with a game-based discovery learning approach, where students are directed to discover concepts, understand the material, and draw conclusions through systematic learning stages.²¹

¹⁴ Nurul Hidayah Siregar et al., "The Application of the PjBL Model Accompanied By E-LKPD Liveworksheet On Learning Outcomes In Islamic Cultural History," *An-Nuba* 5, no. 3 (2025): 341–352.

¹⁵ P Karen Murphy et al., "Examining the Effects of Classroom Discussion on Students' Comprehension of Text: A Meta-Analysis," *Journal of educational psychology* 101, no. 3 (2009): 740.

¹⁶ John Biggs, "Enhancing Teaching through Constructive Alignment," *Higher education* 32, no. 3 (1996): 347–364.

¹⁷ Nabila Qotrunnada, interview by author, Sidoarjo, January 21, 2026

¹⁸ Mahira Putri Salsabila et al., "Analysis of The Effect of The 'Kahoot' Quiz Method on Student Enthusiasm," *International Journal on Education Issues* 1, no. 1 (2025): 44–49.

¹⁹ Dian Ratnawati and Sri Wahyuni, "The Effect of 'Zep Quiz' in Assessing Students' Reading Comprehension Skill," *Journal of Educational Sciences* 10, no. 1 (2026): 468–479.

²⁰ Muhammad Fanani, interview by author, Sidoarjo, January 21, 2026.

²¹ Ramadan Ramadan, Sakut Anshori, and Jumatul Hidayah, "The Effect Of Using Quiz And Game Strategies On Students' Vocabulary Mastery (Experimental Study at Grade 7 Junior High School Darussalam Kepahiang Islamic Boarding School)" (INSTITUT AGAMA ISLAM NEGERI CURUP, 2025).

In terms of curriculum support, the WAKA for curriculum plays an active role in encouraging teachers to innovate in learning.²² This support is realized through training and development of teacher competencies. PAI teachers receive training in the use of digital learning media, both offline and online, and receive mentoring during the implementation process.²³ Furthermore, the implementation of training is also monitored to ensure the effectiveness of applying online educational games in the classroom.

Student responses to the use of online educational games in SKI learning were assessed as very positive. Students showed high enthusiasm, were more spirited, and were able to discuss and cooperate with their group mates. This finding indicates that the Zep Quiz online educational game not only enhances the cognitive aspect but also supports the development of students' social and collaborative skills.

The results of interviews with the madrasah head indicated full support for the utilization of digital technology in PAI learning. The madrasah head assessed that the use of digital technology, including online educational games, is a strategic step in improving the quality of learning as well as the competencies of teachers and students.²⁴ The utilization of digital technology is seen as part of the madrasah's effort to keep up with the times and encourage learning innovation.²⁵

The interview results about the role of online educational games in helping students understand Islamic values and their Islamic history, according to Bu Nabila Qotrunnada, S.Pd., after the researcher interviewed her, she expressed that:

“In my opinion, using educational games can help students become more active in the learning process. When they encounter questions, especially in sections that require written answers, students tend to ask the teacher and find out the correct answer. This curiosity motivates them to be more engaged in learning and improves their understanding of Islamic Cultural History.”²⁶

Based on the interview results above, it states that using educational games can increase students' activeness in learning. Students become more frequent in asking questions and show a high curiosity about the answers to each question given. This situation encourages them to understand the material of Islamic Cultural History more deeply.

In school policy, the use of digital media and online educational games has

²² Priyan L Jayamaha, “Exploring Mixed Reality Board Games as an Innovative Educational Tool for Teaching History in Primary Schools.,” *International Journal of Technology in Education and Science* 8, no. 1 (2024): 20–40.

²³ Dian Hikmayana, “Strategies for Recruiting and Developing Islamic Religious Education Teachers in the Digital Era,” *Journal of Innovative Islamic Education Management* 1, no. 1 (2025): 55–70.

²⁴ Muhammad Mustofa, interview by author, Sidoarjo, January 21, 2026.

²⁵ Muhamad Siswanto, “Digital Revolution in Madrasah Aliyah: Adaptation and Innovation in the Implementation of the Independent Curriculum,” *TEKILA: Journal of Language Teaching and Literature* 1, no. 4 (2024): 285–296.

²⁶ Nabila Qotrunnada, interview by author, Sidoarjo, January 21, 2026.

become part of the learning development program. Every meeting and learning supervision activity always emphasizes the importance of utilizing digital media and technological innovation. This policy aligns with the madrasah's vision and mission which emphasize strengthening educational quality, learning innovation, and the internalization of Islamic values.²⁷

According to the madrasah head, online educational games have an important role in enhancing students' understanding of Islamic values. Through educational game media, students not only obtain teaching material but also find it easier to access and understand the Islamic messages contained in the SKI material. Furthermore, the use of online educational games has been proven to increase student activity and learning motivation. Students appear more enthusiastic, spirited, and show better understanding of the learning material.

The results of interviews with MA students indicated that SKI learning after using the Zep Quiz online educational game was perceived as more interesting and provided a different learning experience. Students mentioned that learning became more challenging due to the time limits and competition in answering quizzes, thus encouraging them to be more focused and active during the learning process.²⁸

In terms of understanding SKI material, students stated that the questions and answers in Zep Quiz were presented concisely, clearly, and were easy to understand.²⁹ This media helped students grasp the core of the material and remember important information. In SKI material discussing the struggles of Islamic figures, such as Prince Diponegoro and Tuanku Imam Bonjol, students admitted to finding it easier to understand the historical events and the values contained within them.

In the context of understanding Islamic values, students expressed that learning through Zep Quiz helped them understand the values of struggle, the spirit of dakwah (proselytization), courage, and nationalism in defending religion and the nation. The exemplary values of these Islamic figures became easier to understand and internalize through interactive and enjoyable learning. This finding confirms that the Zep Quiz online educational game contributes not only to enhancing students' cognitive understanding but also to strengthening Islamic values in SKI learning.³⁰

²⁷ Ja'far Amirudin, Qiqi Yuliati Zaqiah, and Elis Rohimah, "Implementation of Internal Policy Head of Madrasah in Improving the Quality of Learning," *Kharisma: Jurnal Administrasi Dan Manajemen Pendidikan* 3, no. 1 (2024): 16–24.

²⁸ Interview with a student of MA Darul Ulum Waru, Sidoarjo, conducted by the researcher, January 24, 2026

²⁹ Interview with a student of MA Darul Ulum Waru, Sidoarjo, conducted by the researcher, January 24, 2026

³⁰ A Masrukin, "Enhancing Learning Outcomes through Educational Games in Islamic Cultural History at Mi Roudlatul Huda Bibrik Jiwan Madiun," *English Language and Literature in Education Journal* 3, no. 1 (2025): 58–74.

B. The Application of Educational Games as an Innovation in PAI Learning

Based on interviews with students, the Zep Quiz online educational game is considered a highly effective PAI learning medium to implement in the classroom. Students stated that using Zep Quiz provided a different learning experience compared to conventional learning.³¹ Learning was not only focused on delivering material but also presented fun and challenging game elements. The presence of a competitive atmosphere and rivalry in answering quizzes made students feel more challenged to actively engage during the learning process.³²

This finding indicates that Zep Quiz is able to increase the appeal of PAI learning. The competitive element presented in the form of quizzes encourages students to pay more serious attention to the material, because each question becomes an opportunity to prove their own abilities. Therefore, Zep Quiz functions not only as an evaluation medium but also as a form of entertainment.

The research results show that PAI learning using Zep Quiz has a positive impact on student activity. Students conveyed that they became more active during the learning process. This media is considered effective because it can reduce laziness, especially in reading lengthy material. The questions and answers presented briefly, clearly, and directly to the core of the material helped students understand the lesson more quickly.

Student activity was evident from their involvement in answering quizzes, paying attention to the teacher's instructions, and following the learning flow more focused.³³ This condition aligns with the characteristics of game-based learning which places students as active subjects in the learning process. Therefore, Zep Quiz contributes to creating participatory PAI learning oriented towards student involvement.³⁴

Although generally students showed high enthusiasm, the research results also revealed that not all students immediately felt confident to participate maximally. Some students expressed hesitation when answering quizzes, especially when the material presented related to Islamic historical figures considered quite difficult and requiring deeper understanding.

The researcher conducted an interview on the implementation with Mrs. Nabila Qotrunnada, S.Pd., who gave her opinion on the reasons for choosing the online educational game Zep Quiz as a learning medium for SKI, that:

“According to informants, using online games in learning allows students to

³¹ Interview with a student of MA Darul Ulum Waru, Sidoarjo, conducted by the researcher, January 24, 2026

³² Krenare Pireva Nuci et al., “Game-Based Digital Quiz as a Tool for Improving Students’ Engagement and Learning in Online Lectures,” *Ieee Access* 9 (2021): 91220–91234.

³³ David J Shernoff et al., “Student Engagement in High School Classrooms from the Perspective of Flow Theory,” in *Applications of Flow in Human Development and Education: The Collected Works of Mihaly Csikszentmihalyi* (Springer, 2014), 475–494.

³⁴ Dr Muhammad Shahzad Ashfaq, “Exploring the Effectiveness of Game-Based Learning Approaches in Enhancing History Education among Elementary School Students” (2025).

learn while playing, making the learning process more enjoyable and stress-free. In addition, the competitive elements in games can boost students' motivation and enthusiasm for learning. This way, the learning atmosphere becomes more varied, interactive, and not boring.”³⁵

Based on the results of the interview above, it explains that using online games in learning can create a more engaging learning experience because students can learn while playing. This situation makes students feel more comfortable and motivated in participating in the learning process. In addition, the competitive elements in the games also help boost students' enthusiasm for learning, making the learning process more dynamic and not boring.

This hesitation indicates that the level of student participation is influenced not only by the learning media but also by the complexity of the material being studied.³⁶ Nevertheless, the presence of Zep Quiz still helped students dare to try answering, even if not entirely sure of their answers. This shows that online educational games can serve as a means to train students' courage in participating, while also identifying material that still needs to be deepened.³⁷

Based on students' opinions, Zep Quiz is considered very suitable for application in PAI learning. Students stated that they preferred learning using Zep Quiz because it was easier and more practical compared to having to read long text materials. This media helped students understand the material more simply and without burden.

The suitability of Zep Quiz in PAI learning is also seen in its ability to adapt to the characteristics of students who tend to prefer visual, interactive, and technology-based learning.³⁸ Therefore, Zep Quiz can be an alternative PAI learning medium relevant to the needs and learning styles of students in the digital era.

The research results show that the teacher's role is crucial for the successful implementation of the Zep Quiz online educational game. According to students, the teacher has a primary role in creating a learning atmosphere that is not boring. The teacher acts as a director and facilitator who manages the quiz, explains the game rules, and maintains a conducive and enjoyable classroom atmosphere.³⁹

Furthermore, the teacher also plays a role in utilizing the competitive element in Zep Quiz positively. Well-managed competition in answering quizzes can enhance students' learning motivation without causing excessive pressure. Therefore, the success of Zep Quiz implementation is determined not only by the media itself but also

³⁵ Nabila Qotrunnada, interview by author, Sidoarjo, January 21, 2026.

³⁶ Muhammad Ali Ramdhani and Hilmi Muhammadiyah, “The Criteria of Learning Media Selection for Character Education in Higher Education” (2015).

³⁷ Clark Aldrich, *Learning Online with Games, Simulations, and Virtual Worlds: Strategies for Online Instruction* (John Wiley & Sons, 2009).

³⁸ Madinah Febrianty, “Technology-Based Pai Learning Strategies To Improve Students' understanding,” *Jurnal Profesionalisme Guru* 2, no. 1 (2025): 206–213.

³⁹ Interview with a student of MA Darul Ulum Waru, Sidoarjo, conducted by the researcher, January 24, 2026

by the teacher's ability to manage game-based learning so that the objectives of SKI learning can be achieved optimally.

C. Positive Impacts and Challenges of Using Educational Games in Learning

Based on interviews with the SKI subject teacher, the use of the Zep Quiz online educational game has a significant positive impact on the learning process. The teacher conveyed that the use of this media was able to increase students' interest and activity during learning. Students appeared more interested, actively participated, and did not get bored easily. Learning that was previously passive transformed into something more dynamic and interactive.⁴⁰

The researcher conducted an interview with Ms. Nabila Qotrunnada, S.Pd. about the positive impacts she felt after using online educational games, and she stated that:

“The informant stated that using online games can boost students' interest in taking part in lessons. Students become more active during the learning process, don't get bored easily, and show high enthusiasm to continue learning activities. Their interest in online game media encourages them to keep participating and repeat learning activities with even more energy.”⁴¹

Based on the interview results above, the use of online games has a positive impact on student engagement in learning. This can be seen from the increased interest and activeness of the students, reduced boredom during the learning process, and the desire to keep continuing and repeating learning activities. This high level of enthusiasm shows that online games are able to capture students' attention and boost their engagement in learning.

In terms of learning motivation, the teacher stated a positive change in students' motivation and interest in learning after using Zep Quiz. This was due to the game characteristics considered fun and challenging by students. The game and competition elements in Zep Quiz encouraged students to be more enthusiastic in participating in SKI learning.

Besides that, the teacher also faced several challenges in implementing online educational games. The main obstacle encountered was the limitation of internet networks, such as unstable or lagging WiFi connection. Additionally, not all students had adequate devices (mobile phones) to participate in game-based learning. This condition became a barrier to creating equitable learning for all students.

The researcher conducted another interview about the challenges faced in using online educational games in class according to Ms. Nabila Qotrunnada, S.Pd., that:

“The informant explained that the main challenge in using online games for

⁴⁰ Agus Arda Setiawan Telaumbanua, Marchel Anthony Leiwakabessy, and Martin Tampubolon, “The Effectiveness of Active Learning Methods in Overcoming Student Learning Boredom In PAK Subject,” *International Perspectives in Christian Education and Philosophy* 2, no. 3 (2025): 18–28.

⁴¹ Nabila Qotrunnada, interview by author, Sidoarjo, January 21, 2026.

learning is internet connection issues and the limited devices that students have. Having a fairly large number of students in one class often causes the network to slow down, so the games lag. This often leads to complaints from students because it disrupts the flow of learning. To address this problem, students usually use their own data packages or refresh the system with the help of teachers or administrators. Additionally, there are some students who don't bring a cellphone or have devices that don't support game applications. The differences in students' economic situations also affect the availability of adequate devices. As a solution, the school or teachers provide devices that can be used by students facing these limitations.”⁴²

Based on the interview results above, the implementation of online games faces several challenges, especially related to internet network quality and students' device compatibility. The high number of users accessing at the same time often causes technical issues like lag in the application. Additionally, not all students have supportive devices or bring their phones during lessons. To overcome these issues, students can use personal data packages, refresh the system, and make use of devices provided by the school or teacher.

As a solution, the teacher attempted to overcome these obstacles by utilizing personal data packages, refreshing the system as an admin, and encouraging students to share hotspots with peers. Although the technical operation of the game was sometimes considered quite difficult, the teacher still tried to adapt so that learning could run well.

From the learning evaluation results, the teacher assessed that student learning outcomes after using Zep Quiz were quite good. Students showed high enthusiasm and were able to follow the learning more actively. The teacher hopes that in the future, the development of online educational games in PAI learning can continue to be improved, both in terms of features and suitability to students' interests and characteristics.

According to the Vice Principal (WAKA) for curriculum affairs, the use of online educational games has a very influential academic impact on students' understanding and activity.⁴³ The WAKA for curriculum assessed that students became more focused on learning, showed high interest, and found it easier to understand SKI material, especially the stories of the struggles of Islamic figures.⁴⁴

The evaluation results showed a fairly clear difference between learning outcomes before and after the use of online educational games. Learning that was previously monotonous became more varied and interesting. The use of online educational games was considered capable of improving the quality of learning

⁴² Nabila Qotrunnada, interview by author, Sidoarjo, January 21, 2026.

⁴³ Muhammad Fanani, interview by author, Sidoarjo, January 21, 2026.

⁴⁴ Moh In'ami, Alina Audia, and Masrukhin Masrukhin, "Assessment Based on Higher Order Thinking Skill on SKI Learning," *AL-ISHLAH: Jurnal Pendidikan* 15, no. 1 (2023): 443–458.

compared to conventional methods that only focused on lectures and memorization.

However, from the curriculum side, there are several obstacles that need attention. One of the main challenges is the preparation of questions that can encourage higher-order thinking skills, such as analysis and critical thinking. Online educational games tend to be easier to use for memorization-type questions, so special effort is needed in designing questions that align with curriculum demands.

In program evaluation, the WAKA for curriculum emphasized the importance of adjusting cognitive levels based on Bloom's taxonomy, ranging from C1 (remembering), C2 (understanding/memorizing), to C3 (analyzing).⁴⁵ Furthermore, development to level C4 also needs to be done gradually so that the use of online educational games is not only oriented towards fun but also towards achieving learning competencies.

The results of interviews with the madrasah head showed that the implementation of online educational games has a positive impact on the madrasah in general. The madrasah head assessed that the use of online educational games helps direct students towards more positive and beneficial activities.⁴⁶ Student interest in learning has increased, and learning has become more relevant to the characteristics of Generation Z and Generation Alpha who are close to digital technology.⁴⁷

However, in its implementation, the madrasah also faces challenges. One of the main challenges is the potential for students to open other applications outside of learning and the lack of supervision during the use of digital devices. This condition has the potential to reduce the effectiveness of learning if not managed properly.

To overcome these challenges, the madrasah head emphasized the importance of the teacher's active role in supervising during the learning process. Teachers should not be passive but must actively monitor student activities and perform settings and detection of device usage. Future expectations are that the madrasah wants students to be able to use and operate digital devices accurately, in accordance with the madrasah's vision and mission and the established Learning Outcomes (CP).⁴⁸

Based on the students' perspective, the use of the Zep Quiz online educational

⁴⁵ Astama, M. Z. Analisis Faktor Kesulitan Belajar Pada Siswa Kelas XI Materi Jaringan Hewan Di SMA Negeri 1 Ambarawa Kabupaten Semarang. *Edubioprena: Jurnal Ilmiah Pendidikan Biologi, Biologi, & Bioentrepreneurship*, 1(1), (2024), 12-22.

⁴⁶ Muhammad Mustofa, interview by author, Sidoarjo, January 21, 2026.

⁴⁷ Norbert Annuš et al., "Z and Alpha Generation Teaching Methods: Digitalization of Learning Material," *International Journal of Advanced Natural Sciences and Engineering Researches* 7, no. 4 (2023): 224–229.

⁴⁸ Nasucha, J. A. Pendidikan Islam dan Tantangan Globalisasi. *JOIES (Jurnal Studi Pendidikan Islam)*, 1(1), (2016), 205–218. <https://doi.org/10.15642/joies.2016.1.1.205-218>

game has both positive impacts and challenges.⁴⁹ Students expressed that the main obstacles they faced were WiFi network issues, mobile phone device problems, and limited internet data quota. These technical obstacles sometimes hindered their smooth participation in learning.⁵⁰

Nevertheless, the majority of students stated that they were still able to participate well in learning using Zep Quiz. This was due to the ease of access and simple game display, allowing students to quickly understand how to use it. Zep Quiz is considered to open access to easier and more practical learning compared to conventional learning methods.⁵¹

As a suggestion, students hope that the use of the Zep Quiz online educational game in PAI learning can be done more frequently so that they become more accustomed and motivated. Additionally, students also suggested the provision of free data quota or hotspot provision from the school to overcome network constraints. With such support, students believe that game-based learning will become more effective and enjoyable.

Conclusion

Based on the research results, the use of the Zep Quiz online educational game in learning Islamic Cultural History (SKI) at MA Darul Ulum Waru has proven effective in increasing student activity, motivation, and understanding of both the material and Islamic values. Learning, which was previously monotonous and teacher-centered, transformed into a more interactive, participatory, and enjoyable experience through gamification elements such as competition, time limits, and direct feedback. This media not only strengthens students' cognitive aspects but also supports the internalization of values such as struggle, exemplarity, and the spirit of Islam in a more contextual manner. Its implementation aligns with constructivist and active learning approaches and is supported by madrasah policies integrated with the Learning Outcomes (CP).

Although challenges exist, such as network limitations, device constraints, potential gadget distractions, and the need for developing HOTS-based questions, overall, Zep Quiz represents a relevant and representative learning innovation in responding to the demands of PAI learning in the digital era. This research offers clear theoretical and practical contributions, novelty in its context of implementation at the Madrasah Aliyah level, and implications for the development of digital-based learning.

⁴⁹ Lucia Tiodora, Fahmy Imaniar, and Effi Susanti, "Pre-Service English Teachers' Insights on Using Zep Quiz as a Learning Tool in EFL Classrooms," *PROJECT (Professional Journal of English Education)* 9, no. 2 (2026): 520–529.

⁵⁰ Maila Rahiem, "Technological Barriers and Challenges in the Use of ICT during the COVID-19 Emergency Remote Learning" (2020).

⁵¹ Interview with a student of MA Darul Ulum Waru, Sidoarjo, conducted by the researcher, January 24, 2026

References

- Afif, Muhammad, and Purwidiyanto Purwidiyanto. "LITERATURE REVIEW: THE EFFECTIVENESS OF ZEP QUIZ IN INCREASING ENTHUSIASM FOR LEARNING ISLAMIC RELIGIOUS EDUCATION." *JURNAL PENDIDIKAN GLASSER* 10, no. 1 (2026): 40–51.
- Aldrich, Clark. *Learning Online with Games, Simulations, and Virtual Worlds: Strategies for Online Instruction*. John Wiley & Sons, 2009.
- Amirudin, Ja'far, Qiqi Yuliati Zaqiah, and Elis Rohimah. "Implementation of Internal Policy Head of Madrasah in Improving the Quality of Learning." *Kharisma: Jurnal Administrasi Dan Manajemen Pendidikan* 3, no. 1 (2024): 16–24.
- Annuš, Norbert, Ondrej Takáč, Iveta Štempeľová, and Daniel Danca. "Z and Alpha Generation Teaching Methods: Digitalization of Learning Material." *International Journal of Advanced Natural Sciences and Engineering Researches* 7, no. 4 (2023): 224–229.
- Ariestiara, Ajeng Rahmadania. "THE IMPLEMENTATION OF GAME-BASED ASSESSMENT FOR LEARNING THROUGH SQUIGABE IN THE MERDEKA CURRICULUM." In *International Seminar on Humanity, Education, and Language*, 309–318, 2025.
- Ashfaq, Dr Muhammad Shahzad. "Exploring the Effectiveness of Game-Based Learning Approaches in Enhancing History Education among Elementary School Students" (2025).
- Biggs, John. "Enhancing Teaching through Constructive Alignment." *Higher education* 32, no. 3 (1996): 347–364.
- Febrianty, Madinah. "TECHNOLOGY-BASED PAI LEARNING STRATEGIES TO IMPROVE STUDENTS' UNDERSTANDING." *Jurnal Profesionalisme Guru* 2, no. 1 (2025): 206–213.
- Hikmayana, Dian. "Strategies for Recruiting and Developing Islamic Religious Education Teachers in the Digital Era." *Journal of Innovative Islamic Education Management* 1, no. 1 (2025): 55–70.
- Hussain, Mushtaq, Wenhao Zhu, Wu Zhang, and Syed Muhammad Raza Abidi. "Student Engagement Predictions in an E-learning System and Their Impact on Student Course Assessment Scores." *Computational intelligence and neuroscience* 2018, no. 1 (2018): 6347186.
- In'ami, Moh, Alina Audia, and Masrukhin Masrukhin. "Assessment Based on Higher Order Thinking Skill on SKI Learning." *AL-ISHLAH: Jurnal Pendidikan* 15, no. 1 (2023): 443–458.
- Jayamaha, Priyan L. "Exploring Mixed Reality Board Games as an Innovative Educational Tool for Teaching History in Primary Schools." *International Journal of Technology in Education and Science* 8, no. 1 (2024): 20–40.
- Lestarina, Adelia, M Indra Saputra, Syaiful Anwar, and Baharudin Baharudin. "THE MEMORY-GAME-ENHANCED GAME-BASED LEARNING MODEL:

- HOW EFFECTIVE IS IT IN STRENGTHENING STUDENTS'LEARNING INTEREST, SPECIFICALLY THEIR ATTENTION?" *Immuna: Jurnal Studi Pendidikan Agama Islam* 7, no. 2 (2025): 1041–1055.
- Lin, Kuan-Cheng, Ting-Kuan Wu, and Yu-Bin Wang. "Developing a Web-Based and Competition-Based Quiz Game Environment to Improve Student Motivation." *Journal of Networks* 6, no. 5 (2011): 736.
- Maskin, Maskin, Buya Riadi, Saidina Saidina, Lenny Marlina, and Febriyanti Febriyanti. "Digital Transformation in Islamic Education Management: Strategies of Madrasah Principals in Improving the Quality of Technology-Based Learning." *International Journal of Education and Literature* 4, no. 3 (2025): 319–328.
- Masrukin, A. "Enhancing Learning Outcomes through Educational Games in Islamic Cultural History at Mi Roudlatul Huda Bibrik Jiwan Madiun." *English Language and Literature in Education Journal* 3, no. 1 (2025): 58–74.
- Miles, Matthew B, A Michael Huberman, Johnny Saldana, and Tjetjep Rohindi Rohidi. "F. Analisis Data." *Implementasi Kurikulum Merdeka Di Sekolah* 61 (1996).
- Muhammadiyah, Universitas, and Journal Cover. "Table Of Contents" 7444 (n.d.): 1–16.
- Mukul, Esin, and Gülçin Büyüközkan. "Digital Transformation in Education: A Systematic Review of Education 4.0." *Technological Forecasting and Social Change* 194 (2023): 122664.
<https://www.sciencedirect.com/science/article/pii/S0040162523003499>.
- Murphy, P Karen, Ian A G Wilkinson, Anna O Soter, Maeghan N Hennessey, and John F Alexander. "Examining the Effects of Classroom Discussion on Students' Comprehension of Text: A Meta-Analysis." *Journal of educational psychology* 101, no. 3 (2009): 740.
- Muslimin, Muslimin. "Integrating Zep Quiz into IPAS Instruction to Enhance Fourth Grade Students' Critical Thinking Skills." *Journal of Education and Computer Applications* 2, no. 2 (2025): 30–37.
- Nuci, Krenare Pireva, Rabail Tahir, Alf Inge Wang, and Ali Shariq Imran. "Game-Based Digital Quiz as a Tool for Improving Students' Engagement and Learning in Online Lectures." *Ieee Access* 9 (2021): 91220–91234.
- Rahiem, Maila. "Technological Barriers and Challenges in the Use of ICT during the COVID-19 Emergency Remote Learning" (2020).
- Ramadan, Ramadan, Sakut Anshori, and Jumatul Hidayah. "The Effect Of Using Quiz And Game Strategies On Students' Vocabulary Mastery (Experimental Study at Grade 7 Junior High School Darussalam Kepahiang Islamic Boarding School)." INSTITUT AGAMA ISLAM NEGERI CURUP, 2025.
- Ramdhani, Muhammad Ali, and Hilmi Muhammadiyah. "The Criteria of Learning Media Selection for Character Education in Higher Education" (2015).
- Rapaka, Anuj, S C Dharmadhikari, Kishori Kasat, Chinnem Rama Mohan, Kuldeep Chouhan, and Manu Gupta. "Revolutionizing Learning – A Journey into

- Educational Games with Immersive and AI Technologies.” *Entertainment Computing* 52 (2025): 100809.
<https://www.sciencedirect.com/science/article/pii/S1875952124001770>.
- Ratnawati, Dian, and Sri Wahyuni. “The Effect of ‘Zep Quiz’ in Assessing Students’ Reading Comprehension Skill.” *Journal of Educational Sciences* 10, no. 1 (2026): 468–479.
- Salsabila, Mahira Putri, M Fahmi Aziz, Nur Faizah, Satrio Bagus Putra, and Efvelin BS. “Analysis of The Effect of The’Kahoot’Quiz Method on Student Enthusiasm.” *International Journal on Education Issues* 1, no. 1 (2025): 44–49.
- Setyaningrum, Tafrica Dewi, Handoyo Saputro, and Dinia Risti Apriani. “Implementation of the Team Games Tournament (TGT) Learning Model Assisted by Zep Quiz Media in Science Learning to Improve Students’ Learning Motivation in Grade VIII at SMP Muhammadiyah 9 Yogyakarta.” In *Proceedings of International Conference on Teacher Profession Education*, 3:820–831, 2025.
- Shernoff, David J, Mihaly Csikszentmihalyi, Barbara Schneider, and Elisa Steele Shernoff. “Student Engagement in High School Classrooms from the Perspective of Flow Theory.” In *Applications of Flow in Human Development and Education: The Collected Works of Mihaly Csikszentmihalyi*, 475–494. Springer, 2014.
- Siregar, Nurul Hidayah, Khadijah Khadijah, Rivdya Eliza, Marhamah Marhamah, Milya Sari, and Juliana Batubara. “The Application of the PjBL Model Accompanied By E-LKPD Liveworksheet On Learning Outcomes In Islamic Cultural History.” *An-Nuba* 5, no. 3 (2025): 341–352.
- Siswanto, Muhamad. “Digital Revolution in Madrasah Aliyah: Adaptation and Innovation in the Implementation of the Independent Curriculum.” *TEKILA: Journal of Language Teaching and Literature* 1, no. 4 (2024): 285–296.
- Telaumbanua, Agus Arda Setiawan, Marchel Anthony Leiwakabessy, and Martin Tampubolon. “The Effectiveness of Active Learning Methods in Overcoming Student Learning Boredom In PAK Subject.” *International Perspectives in Christian Education and Philosophy* 2, no. 3 (2025): 18–28.
- Tiodora, Lucia, Fahmy Imaniar, and Effi Susanti. “Pre-Service English Teachers’ Insights on Using Zep Quiz as a Learning Tool in EFL Classrooms.” *PROJECT (Professional Journal of English Education)* 9, no. 2 (2026): 520–529.