



## Utilization of Quizizz-Based Digital Media in Islamic Religious Education Learning at SMKN 1 Bandar Lampung

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### Abstract

*The use of Quizizz-based digital media in Islamic Religious Education (IRE) instruction at SMKN 1 Bandar Lampung aims to enhance student motivation, participation, and engagement in the learning process. This study employs a qualitative method with a field study approach. Data were collected through direct observation and in-depth interviews with key informants, consisting of PAI subject teachers and students from class X TJKT 3 (Computer Networking and Telecommunications Technology). The selection of these subjects was based on the students' vocational background, which involves high digital literacy, thereby minimizing technical barriers. Key findings indicate that the use of Quizizz transformed the PAI learning paradigm from one previously focused on rote memorization into a more interactive approach through gamification elements. Features such as leaderboards, timers, and instant feedback were proven to motivate students to participate actively and encourage self-directed learning. Additionally, the automatic reporting feature makes it easier for teachers to evaluate learning outcomes efficiently. Technical challenges, such as unstable internet connections, were addressed through creative solutions such as using tethering and group work systems. Based on these findings, it is recommended that the use of Quizizz be combined with project-based learning strategies to create a more effective and inclusive learning environment.*

**Keywords:** Learning Motivation, Active Participation, Gamification, Educational Technology, Quizizz

### Abstrak

*Pemanfaatan media digital berbasis Quizizz dalam pembelajaran Pendidikan Agama Islam (PAI) di SMKN 1 Bandar Lampung bertujuan untuk meningkatkan motivasi, partisipasi, dan keterlibatan siswa dalam proses belajar. Penelitian ini menggunakan metode kualitatif dengan pendekatan studi lapangan. Data dikumpulkan melalui observasi langsung serta wawancara mendalam terhadap informan kunci, yang terdiri dari guru mata pelajaran PAI dan siswa kelas X TJKT 3 (Teknik Jaringan Komputer dan Telekomunikasi). Pemilihan subjek ini didasarkan pada latar belakang kejuruan siswa yang memiliki literasi digital tinggi sehingga hambatan teknis dapat diminimalisir. Temuan utama menunjukkan bahwa penggunaan Quizizz mampu mengubah paradigma pembelajaran PAI yang sebelumnya berfokus pada hafalan menjadi lebih interaktif melalui elemen gamifikasi. Fitur seperti leaderboard, pengatur waktu, dan umpan balik instan terbukti memotivasi siswa untuk berpartisipasi aktif serta mendorong pembelajaran mandiri. Selain itu, fitur laporan otomatis mempermudah guru dalam mengevaluasi hasil belajar secara efisien. Kendala teknis berupa instabilitas koneksi internet diatasi melalui solusi kreatif seperti penggunaan tethering dan sistem kerja kelompok. Berdasarkan temuan ini, disarankan agar pemanfaatan Quizizz dikombinasikan dengan strategi pembelajaran berbasis proyek untuk menciptakan lingkungan belajar yang lebih efektif dan inklusif.*

**Kata kunci:** Motivasi Belajar, Partisipasi Aktif, Gamifikasi, Teknologi Pendidikan, Quizizz

## **Introduction**

Learning is the primary activity of the educational process in schools, aiming to produce behavioral changes. These changes encompass cognitive, affective, and psychomotor domains. These learning activities require active learning, participation, and interactive communication between teachers and students. Learning activities must be designed to achieve learning objectives. Success in the learning process can be seen from conceptual understanding, material mastery, and student achievement. Students with a high level of conceptual understanding and material mastery will achieve higher achievement (Fadila Khairunnisa et al., 2024) . Furthermore, another determining factor for successful learning is the appropriate application of learning models and media. Educators are required to understand learning methods, especially those related to learning models. The definition of learning media is designing learning and planning teaching and learning activities. The benefits of learning media include clarifying the presentation of material and information, thereby enhancing and improving the learning process and outcomes. Learning media can also direct students' attention, thus fostering learning motivation, which impacts learning activity and outcomes. To meet the challenges of digital-based learning, along with the development of technology and information, it encourages the use of innovative, effective, and efficient learning media. Therefore, a digital-based learning medium is needed to improve student learning outcomes. Quizizz is a multiplayer learning application, accessible through the website and used by students in class to play together in class or for homework assignments. The results of these assignments can be used for assessments taken by teachers. This application already contains a collection of quizzes, which students can also easily access. Quizizz is very suitable for building interactive learning, because students can work on quizzes with friends, simultaneously, and can see the ranking obtained in answering the quizzes (Pranoto, 2020) .

In this process, educators need to be present to deliver learning materials using various media, so they can realize the many benefits of using these media, such as providing freshness and new variations in students' learning experiences. Furthermore, the use of learning media during the learning process is expected to stimulate students' interests and desires, prevent them from feeling bored, have a positive psychological

impact, and even improve the learning process and outcomes. However, the use of varied media is not only expected to increase student motivation and learning outcomes, but also to prevent students from feeling stressed and bored until the end of the learning process. Many education experts recognize that learning media functions as a very effective tool for teaching and learning activities, both in and outside the classroom, especially in improving student learning outcomes. When the learning process takes place in a fun, comfortable, effective, and interesting way, it can be said that learning is going well. Therefore, educators are expected to utilize innovation in learning, including in the use of learning media (Nirmalasari & Susanti, 2023) .

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The limited variety of traditional learning methods and media, such as lectures, tends to cause boredom and low student engagement in the learning process. In the Islamic Religious Education learning process at SMK Negeri 1 Bandar Lampung, quizzes have been implemented in between lessons using various media, one of which is online media, namely the Quizizz application. The results of observations carried out by the author can be said to be less than optimal because it only utilizes web media and needs to develop the use of Quizizz further. The use of Quizizz as a learning tool can improve student learning achievement in Islamic Religious Education lessons, according to research, not only in terms of quantity but also quality, because the learning environment is more interesting and does not seem boring (Masnu'ah, Aisyah, Uin, & Semarang, 2024). By using this application, teachers can create a more interactive and enjoyable learning atmosphere. Teachers can see the extent of the material learned by each student and find parts that are still difficult for them to understand (Dalimunthe et al., 2024) .

The application of Quizizz makes Islamic Religious Education (PAI) learning more contextual and applicable. For example, quizzes containing questions related to

Islamic history, core teachings, and ethics facilitate students' comprehensive understanding of concepts and subject matter. This also trains students' critical thinking skills and memory in understanding Islamic religious material (Irawan & Amirudin, 2024). The use of the Quizizz application in Islamic Religious Education (ISE) learning is expected to increase students' interest in actively participating in the learning process at SMKN 1 Bandar Lampung.

Various studies have demonstrated the effectiveness of Quizizz in improving cognitive and motivational learning outcomes quantitatively, but there are still limited qualitative studies that explore the learning experiences of Islamic Religious Education (PAI) students in the context of Vocational High Schools (SMK). Most previous studies have focused on the final results (achievement), while the dynamics of implementation in the field and teachers' strategies in mitigating digital infrastructure constraints in the SMK environment have not been widely discussed. Therefore, this study aims to comprehensively describe the use of Quizizz-based digital media in Islamic Religious Education (PAI) learning at SMKN 1 Bandar Lampung and analyze its impact on student motivation and active participation through a qualitative perspective.

## **Research methods**

The research conducted by the author is field research, which aims to examine in depth the current conditions and interactions between individuals, groups, institutions, and communities. Qualitative research focuses on processes, events, or developments, where the collected data is in the form of qualitative information. Examples include information on traditions and culture, explanations of the acculturation process, biographical information, and so on. Therefore, this research model is qualitative. Descriptive research aims to describe the research subject based on data obtained from the group of subjects studied. This research is directed at obtaining a complete, in-depth, and authentic picture of the phenomenon being studied in order to gain new understanding or findings. In the descriptive qualitative research method, there are specific steps that must be followed: first, identifying the problem being studied, then finding the needed information by collecting it through observation. After that, the collected data is processed and analyzed before finally drawing conclusions from the research results.

This research was conducted at SMK Negeri 1 Bandar Lampung, located at Gunung Sulah, Way Halim, Jl. Pulau Morotai No. 33, Jagabaya III, Sukarame District,

Bandar Lampung City. The reason the researcher chose SMK Negeri 1 Bandar Lampung as the research location was because it has adequate facilities and technological access, thus enabling the implementation of digital-based learning and data collection effectively and efficiently. It also allows for the observation of real interactions between students and teachers in using Quizizz so that the impact of this media on Islamic Religious Education (PAI) learning interests and outcomes can be concretely determined. In this study, the author collected data from certain individuals involved in the issues discussed. In this study, the subjects of the interviews by the author were teachers and students of class X TJKT 3 (Computer Network and Telecommunication Engineering) at SMK Negeri 1 Bandar Lampung.

Sampling in this research is generally carried out from data from the Pre-Field Phase. At this stage, the researcher prepares and plans the research, evaluates the preliminary fieldwork, and selects information providers and research equipment. Then, temporary observations are conducted. In the Field Research Phase, the researcher conducts direct research using predetermined methods, including observation, interviews, and documentation. The researcher also participates directly in the data collection and research. In the Data Analysis Phase, the researcher analyzes the data obtained from observations, interviews, and documentation. In the Research Report Writing Phase, the researcher writes the research results in a systematic manner according to the specified writing procedures.

## **Results and Discussion**

### **Dynamics of Quizizz Implementation in Islamic Religious Education Learning at SMKN 1 Bandar Lampung**

During the preparation phase, Islamic Religious Education (PAI) teachers at SMKN 1 Bandar Lampung integrated Islamic Cultural History (SKI) and Fiqh (Islamic Jurisprudence) materials into the Quizizz platform by designing a variety of questions oriented towards critical and applicative thinking. This step demonstrates that the use of technology in the school does not only function to digitize static materials, but also as an effort to transform learning evaluation to be more dynamic and based on real-time data. Theoretically, this integration aligns with the *Technological Pedagogical Content Knowledge* (TPACK) framework, where learning effectiveness is determined by the teacher's ability to synergize mastery of religious material with appropriate digital tools to increase student engagement in the Gen-Z era (Wulandari et al., 2024) .

*Quizizz* -based quizzes in TJKT 3 classes sparked high enthusiasm, with students responsively integrating their digital devices with the Islamic Religious Education (PAI) learning system as soon as the access code was shared. This phenomenon demonstrates the learning efficiency created through technology *habituation* ; students' vocational backgrounds in Computer Network Engineering and Telecommunications minimize technical barriers, allowing for an organic transition from conventional to digital methods and increased active engagement. Theoretically, this reinforces the concepts of *Digital Fluency* and *Game-Based Learning* (GBL), which state that learning environments that incorporate digital competition elements and technologies familiar to students can reduce learning anxiety *while* increasing intrinsic motivation in absorbing theoretical-normative material (Tamyiz et al., 2025) .

During the quiz, the *live leaderboard feature* became the main focus, triggering emotional reactions from students, ranging from expressions of joy when their position improved to increased concentration to catch up on points. This dynamic demonstrates that instant visualization of achievements can transform the classroom atmosphere into a competitive yet supportive ecosystem, where students no longer view evaluation as a burden, but rather as a challenge that spurs active engagement. Theoretically, this aligns with the principles of Self-Determination Theory (SDT), particularly regarding the competence aspect, as well as the concept of Gamification, which asserts that game mechanics such as *leaderboards* can satisfy students' psychological need for recognition of their achievements, significantly increasing intrinsic motivation and learning persistence in digital environments (Cigdem et al., 2024) .

Students, particularly those majoring in Computer and Information Technology (TJKT), demonstrated high levels of cognitive independence by completing quizzes using personal devices without relying on external assistance. This indicates that the use of *Quizizz* creates a personalized learning environment, where students' technological expertise allows them to fully control the pace and decision-making process of answering questions. Theoretically, this phenomenon reflects the principles of Constructivism and the concept of Self-Regulation. Learning (SRL), which emphasizes that the right digital learning environment can encourage students to become independent learners who actively construct knowledge and regulate their own cognitive strategies (Prakash Chand, 2023) .

The integration of visual memes that appear after answers and the use of dynamic background music in the *Quizizz platform* have proven effective in defusing classroom

tension and triggering positive affective responses in the form of laughter and relaxation in students during observations. The use of these entertainment elements indicates an effort to deconstruct the stigma surrounding Islamic Religious Education (PAI) learning as rigid, transforming it into a more fluid learning experience without losing the substance of the material. Theoretically, this is in line with Stephen Krashen's *Affective Filter Hypothesis*, which states that a learning environment with low stress levels (low anxiety) can open up students' emotional barriers, thus facilitating the absorption of information and increasing cognitive engagement through an *edutainment approach*. (Mehak Jawed et al., 2025) And (Zhang, 2023). Research conducted by (Abdul Latiff et al., 2024) shows that entertainment elements in education can increase students' sense of involvement, reduce anxiety, and make the classroom atmosphere more dynamic.

These findings are highly relevant to existing theories in the literature on the use of digital media in learning. One theory that can be linked is constructivism, which states that students construct knowledge through active experiences (Prakash Chand, 2023). In this context, the use of Quizizz allows students to learn independently, compete in a fun atmosphere, and receive immediate feedback. Furthermore, motivational theories, such as those proposed by (Kaya & Ercag, 2023), are also relevant, stating that gamification elements such as leaderboards and rewards through memes and music can increase students' intrinsic motivation. Learning that involves technology, especially game-based learning, helps create a more engaging learning experience and motivates students to continue active participation (Luu et al., 2025). Interactive features in Quizizz, such as live leaderboards, a variety of question options, and the integration of memes and music, have proven effective in increasing student motivation. As a medium accessible to all students, Quizizz facilitates more participatory and engaging learning. Learning that utilizes interactive elements like this can generate enthusiasm for learning. Student engagement increases with immediate feedback on their answers, as well as the enjoyment they derive from the entertaining elements of the quizzes. A study by Bepari & Imam (2025) confirms that gamification elements in education have significant potential to increase student motivation and make the learning experience more enjoyable.

The Quizizz feature also helps teachers manage classes more efficiently (Kuntari, 2023). Islamic Religious Education (PAI) teachers utilize the *Quizizz* analytical *dashboard* to monitor student learning progress in real-time and obtain summary data on material understanding immediately after the quiz ends. This instant data availability allows teachers

to accurately map student competency mastery, allowing for rapid identification of weak points in material understanding as a basis for learning interventions. Theoretically, this practice applies the principles of Data-Driven Decision Making (DDDM) in education, where real-time evaluation serves as an essential formative assessment for designing more precise and adaptive remediation and enrichment teaching strategies in the future (Kaspi & Venkatraman, 2023) .

Although the implementation of Quizizz in Islamic Religious Education (PAI) learning at SMKN 1 Bandar Lampung has proven effective, several challenges remain. One is technical constraints such as unstable internet connections, which can disrupt the smooth running of quizzes. Furthermore, further efforts are needed to ensure that all students, especially those without personal devices, can easily access the platform. Therefore, it is crucial for schools to provide adequate devices and ensure a stable internet infrastructure. Going forward, it is recommended that Quizizz be expanded by adding new features that can further increase student engagement and motivation, such as integration with social media for sharing achievements and quiz results.

### **Implications of Using Digital Media on Student Motivation and Active Participation**

The implementation of *Quizizz* in Islamic Religious Education (PAI) learning at SMKN 1 Bandar Lampung successfully shifted students' perceptions from boredom with rote memorization to active engagement through *leaderboard elements* , time limits, and a variety of competitive questions. This transformation demonstrates that gamification can deconstruct the stigma of rigid religious studies, transforming them into dynamic learning experiences that provide instant gratification for students' cognitive achievements. These results support the theory proposed by (Yorganci, 2022) that intrinsic motivation can increase when learning activities involve more active participation and provide relevant, immediate feedback.

*Quizizz* question , triggering behavioral responses such as increased accuracy for low-ability students and increased consistency for high-ability students. This mechanism demonstrates that *real-time transparency of results* serves as a cognitive mirror that facilitates self - *assessment* , enabling students to consciously assess the gap between their existing knowledge and the demands of the material being studied. Previous research has shown that timely and relevant feedback is a factor that can improve student learning outcomes (Meiriza et al., 2025) . This rapid feedback creates a continuous learning cycle, encouraging students to strive for greater self-improvement.

Quizizz's automated, graph- and table-based reporting features to instantly map student achievement and determine remedial program targets without manual review. This efficiency demonstrates the transformation of teachers' roles from assessment administrators to educational data analysts capable of delivering more precise and targeted pedagogical interventions. This strongly supports the principles of *data-driven learning*, where instructional decisions are based on more objective and accurate analysis (Salwa et al., 2025). Unstable internet connections in school areas often cause students to be disconnected *from* the system mid-game, resulting in lost points and triggering collective frustration in the classroom. These technical constraints demonstrate that the success of digitalized learning relies heavily on infrastructure readiness; disruptions to network access not only hamper the evaluation process but also disrupt the flow *and* enthusiasm for learning that has been established.

To overcome technical challenges, teachers at SMKN 1 Bandar Lampung implemented creative solutions such as *tethering* and group work. This approach ensures all students remain actively involved while strengthening collaboration and a sense of community. Through this interaction, students can learn from each other, thereby improving their understanding of the material. The implementation of Quizizz in Islamic Religious Education (PAI) learning at SMKN 1 Bandar Lampung is highly relevant to the theory that the right digital media can create a fun learning environment. According to Khomsinudin et al. (2024), the use of appropriate technology in learning can increase the appeal of the material and make it easier for students to absorb information. The use of interactive digital media like this, which incorporates game elements, provides opportunities for students to learn in a more enjoyable way and reduces the stress that often arises in traditional learning (Gofur et al., 2025).

Gamification in learning through Quizizz has a positive impact on student engagement at SMKN 1 Bandar Lampung. From the observation results, elements such as limited time to answer questions, leaderboards, and direct scores motivate students to participate more actively in quizzes in the learning process. They feel challenged to achieve the highest score and compete with their friends in an enthusiastic atmosphere. This is in accordance with research by (Sakdiah et al., 2025) which shows that gamification elements can increase student motivation and engagement in learning.

The use of the instant feedback feature on Quizizz allows students to conduct *real-time self-evaluation*, enabling them to identify gaps in understanding and make improvements autonomously. This process transforms assessment into a reflective

experience that encourages students to take full responsibility for their academic progress. Research by Eliezer & Marantika, 2021, shows that self-directed learning can improve students' metacognitive skills, which are crucial for long-term learning. Research shows that rapid feedback can strengthen students' understanding and increase their motivation to continue trying (Astrero, 2024).

Overall, the implementation of Quizizz in Islamic Religious Education (PAI) learning at SMKN 1 Bandar Lampung demonstrates that the right digital media can create a fun and effective learning environment. By utilizing gamification elements and interactive features, learning no longer feels boring and students are more motivated to participate actively. This learning effectiveness is supported by theories that technology, when used correctly, can increase student engagement, strengthen their understanding, and create a fun learning experience. Therefore, the use of digital media such as Quizizz should continue to be developed and integrated into various subjects to improve the quality of learning.

## Conclusion

Here is a paraphrase with deeper academic diction, more formal sentence structure, and a cohesive logical flow:

Quizizz-based digital platform in Islamic Religious Education (PAI) instruction at SMKN 1 Bandar Lampung has empirically succeeded in escalating students' motivation and discursive engagement through the integration of gamification elements, such as *leaderboards* and *instant feedback*, which construct a competitive and autonomous learning climate. Despite facing disparities in digital infrastructure, pedagogical mitigation strategies through *tethering* and collaborative learning have proven effective in maintaining instructional inclusivity, which also confirms that technical obstacles can be overcome through adaptive pedagogical resilience. This research provides a significant theoretical contribution to the discourse of PAI and educational technology by demonstrating that digitalization can dynamize normative-theological religious content to be more interactive and contextual for the *digital native generation*. As a practical implication, educators are recommended to transform gamification instruments towards higher-order *thinking skills*, while educational institutions are required to optimize the stability of internet connectivity to ensure the sustainability of digital transformation. Furthermore, future researchers are advised to conduct comparative studies to test the efficacy of this platform on the internalization of character

values and affective domains in Islamic Religious Education materials that have higher theological complexity.

## Reference

- Abdul Latiff, D. I., Latif, S. A., Salman, A. S., Megat Zambri, W. A. A., & Kamal, S. (2024). Students' self-efficacy and enjoyment in gamification influence academic engagement in classroom: A study among undergraduate students. *International Journal of Academic Research in Business and Social Sciences*, 14(6), 998–1008. <https://doi.org/10.6007/IJARBS/v14-i6/21735>
- Astrero, M. K. (2024). Students' perception of receiving immediate assessment feedback towards self-efficacy in learning: Basis for implementing technology-assisted assessment strategy. *Social Science & Humanities Journal*, 8(6), 3825–3834. <https://doi.org/10.18535/sshj.v8i06.1146>
- Bepari, N. G., & Imam, A. (2025). Enhancing English language skills through fun-focused teaching: An action research in Bangladeshi classrooms. *Journal of Creative Writing*, 9(1), 79–93. <https://doi.org/10.70771/jocw.163>
- Cigdem, H., Ozturk, M., Karabacak, Y., Atik, N., Gürkan, S., & Aldemir, M. H. (2024). Unlocking student engagement and achievement: The impact of leaderboard gamification in online formative assessment for engineering education. *Education and Information Technologies*, 29(18), 24835–24860. <https://doi.org/10.1007/s10639-024-12845-2>
- Dalimunthe, U., Megawati, B., & Syafriyati, R. (2024). The influence of Quizizz media on Islamic religious education learning in class XI of SMAN 2 Rantau Selatan. *Cendekia Pendidikan*, 4(4), 50–54.
- Eliezer, J., & Marantika, R. (2021). Metacognitive abilities and autonomous learning strategies in improving learning outcomes. *Journal of Education and Learning (EduLearn)*, 15(1), 88–96. <https://doi.org/10.11591/edulearn.v15i1.17392>
- Fadila Khairunnisa, Mulyani, P. S., & Kamal, F. (2024). Implementation of Quizizz-based digital media in the history of Islamic culture subject at MAN 2 Wonosobo. *Journal of Islamic Religious Management and Education*, 2(4), 121–130. <https://doi.org/10.61132/jmpai.v2i4.376>
- Gofur, A., Aedi, K., & Syamsu, P. K. (2025). Integrating Quizizz into Arabic language teaching: Uses and educational implications. *Al-Irfan: Journal of Arabic Literature and Islamic Studies*, 8(1), 375–390. <https://doi.org/10.58223/al-irfan.v8i1.379>
- Irawan, I. C., & Amirudin, N. (2024). Application of the Quizizz method in Islamic religious education learning. *Al-Ilmi Journal of Islamic Education*, 7(1), 37. <https://doi.org/10.32529/al-ilmi.v7i1.2937>
- Kaspi, S., & Venkatraman, S. (2023). Data-driven decision-making (DDDM) for higher education assessments: A case study. *Systems*, 11(6), 306. <https://doi.org/10.3390/systems11060306>
- Rich, O. S., & Ercag, E. (2023). The impact of applying challenge-based gamification programs on students' learning outcomes: Academic achievement, motivation and flow. *Education and Information Technologies*, 28(8), 10053–10078. <https://doi.org/10.1007/s10639-023-11585-z>
- Khomsinnudin, K., Pangeran, G. B., Tamyiz, A., Wulandari, C. E., & Firdaus, F. A. (2024). Modernity and locality: Building sustainable Islamic education. *Journal of Education Research*, 5(4), 4418–4428. <https://doi.org/10.37985/jer.v5i4.1523>

- Kuntari, S. (2023). Utilization of digital media in learning. *Proceedings of the National Seminar of the Faculty of Tarbiyah and Teacher Training, IAIM Sinjai*, 2, Article 0. <https://doi.org/10.47435/sentikjar.v2i0.1826>
- Luu, D. P., Nguyen, V. T. X., Do, L. C., & Nguyen, T. P. (2025). A self-determination theory model of gamified EFL intrinsic motivation. *EuroGlobal Journal of Linguistics and Language Education*, 2(5), 60–74. <https://doi.org/10.69760/egjlle.2505005>
- Jawed, M., Ali, K., & Ahmed, T. (2025). Exploring the connection between presence and absence of Krashen's theory on learner's input and affective filters: A triangulation approach. *Journal of Arts and Linguistics Studies*, 3(2), 1811–1839. <https://doi.org/10.71281/jals.v3i2.305>
- Meiriza, M. S., Hutagalung, M., Manurung, T., Siagian, H., & others. (2025). The effectiveness of implementing Quizizz as a learning evaluation media to improve learning outcomes of economics education students. *JAHE: Journal of Accounting, Law and Education*, 2(1), 229–235. <https://doi.org/10.57235/jahe.v2i1.5873>
- Mukharomah, N. (2021). The use of the Quizizz application as an online assessment media at MI Al Muqorrobiyah. *Waniambey: Journal of Islamic Education*, 2(1), 12–22. <https://doi.org/10.53837/waniambey.v2i1.52>
- Nirmalasari, S. P. I., & Susanti, M. M. I. (2023). The effectiveness of Quizizz in improving elementary school student learning outcomes. *Jurnal Basicedu*, 7(2), 1286–1294. <https://doi.org/10.31004/basicedu.v7i2.4926>
- Prakash Chand, S. (2023). Constructivism in education: Exploring the contributions of Piaget, Vygotsky, and Bruner. *International Journal of Science and Research*, 12(7), 274–278. <https://doi.org/10.21275/SR23630021800>
- Pranoto, S. E. (2020). Using the game-based learning Quizizz to increase student learning activity in sociology subjects on globalization material for class XII social sciences. *Habitus: Journal of Education, Sociology, & Anthropology*, 4(1), 25. <https://doi.org/10.20961/habitus.v4i1.45758>
- Sakdiah, S., Hayati, H., Mahmud, S., & Furqan, M. (2025). Gamification in Islamic religious education: Developing interactive learning media via Quizizz with the ADDIE model. *Edukasi: Jurnal Pendidikan dan Pengajar*, 12(1), 187–207. <https://doi.org/10.19109/d48tv716>
- Salwa, N., Hanapiah, F., Anggia, I., Maghfira, R., & Rustini, T. (2025). Analysis of the effect of using Quizizz in making the giving of questions and quizzes to students effective through digital media. *Indo-MathEdu Intellectuals Journal*, 6, 3978–3984. <https://doi.org/10.54373/imeij.v6i3.3326>
- Tamyiz, A., Milaturahmah, B. S., & Wulandari, C. E. (2025). Children's education in the digital era: The role of innovation and technology in developing 21st century intelligence. *Al-Athfal Journal of Child Education*, 6(2), 153–165.
- Wulandari, C. E., Firdaus, F. A., & Saifulloh, F. (2024). Promoting inclusivity through technology: A literature review in educational settings. *Journal of Learning and Technology*, 3(1), 19–28. <https://doi.org/10.33830/jlt.v3i1.9731>
- Yorganci, S. (2022). The interactive e-book and video feedback in a multimedia learning environment: Influence on performance, cognitive, and motivational outcomes. *Journal of Computer Assisted Learning*, 38(4), 1005–1017. <https://doi.org/10.1111/jcal.12658>
- Zhang, Y. (2023). Teaching strategies of college English listening based on affective filter hypothesis. *The Educational Review, USA*, 7(1), 26–30. <https://doi.org/10.26855/er.2023.01.007>