THE IMPLEMENTATION OF GAMIFICATION METHOD IN ISLAMIC RELIGIOUS EDUCATION AT SMK MUHAMMADIYAH 1 PURBALINGGA

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Abstract

The rapid transformation of educational practices in the digital era has reshaped the expectations and behavior of learners, particularly Generation Z students who are highly exposed to technology, interactivity, and game-based digital environments. This study investigates the implementation of the gamification method in Islamic Religious Education (PAI) learning at SMK Muhammadiyah 1 Purbalingga, an Islamic vocational high school committed to integrating religious values with technological advancement. The research explores three main objectives: the process of applying gamification in PAI classrooms, students' responses toward the method, and the supporting as well as inhibiting factors encountered during its implementation. Using a qualitative descriptive approach, the study draws on classroom observation, semi-structured interviews with PAI teachers and students, and documentation analyses of lesson plans, digital tools, gamified activities, and instructional media. The findings reveal that gamification elements—such as points, digital badges, leaderboards, challenges, and interactive quizzes—successfully increase students' motivation, participation, responsibility, and enjoyment in learning PAI. Students reported that gamification transformed abstract Islamic concepts into engaging, comprehensible, and meaningful learning experiences. Supporting factors include teachers' creativity, adequate digital infrastructure, and the school's technological culture, while inhibiting factors involve digital literacy gaps, inconsistent internet connectivity, time limitations, and occasional device unavailability. The study concludes that gamification serves as an effective pedagogical approach to strengthening Islamic Religious Education, particularly for Generation Z students who respond strongly to game-like learning environments. It also emphasizes the importance of teacher training, infrastructural support, and pedagogical balance to ensure that game elements remain aligned with PAI learning objectives and Islamic ethical values. The implications of this research highlight the potential of gamification to modernize PAI instruction and contribute to a more interactive, value-oriented, and technology-integrated learning ecosystem.

Keywords: *Gamification, Islamic Religious Education, Student Character.*

INTRODUCTION

The emergence of digital learning environments has profoundly transformed the landscape of education, including the teaching of religious subjects such as Islamic Religious Education (PAI). Traditionally, PAI classrooms have been characterized by teacher-centered approaches, rote memorization, and limited interaction, resulting in students' declining motivation and low engagement in understanding Islamic teachings.

In the context of Indonesian vocational schools, this challenge becomes even more pronounced as students often prioritize technical skills over theoretical subjects like PAI. At SMK Muhammadiyah 1 Purbalingga, preliminary observations indicated that many students perceived PAI as monotonous and less appealing compared to vocational subjects, leading to minimal participation, fragmented attention, and difficulties in internalizing religious values. These circumstances demanded urgent pedagogical innovation that aligns with the learning needs and behavioral characteristics of Generation Z learners.

Gamification has emerged as one of the most prominent innovations in contemporary education. Defined as the application of game elements in non-game contexts, gamification leverages rewards, competition, challenges, progress tracking, and interactive digital engagement to create an enjoyable learning environment. The fundamental premise of gamification is that learning becomes more effective when students feel internally motivated, emotionally invested, and actively involved in the learning process. Several studies across different countries have demonstrated that gamification enhances student engagement, increases intrinsic motivation, and fosters higher-order thinking skills. However, the application of gamification in Islamic Religious Education remains relatively understudied, particularly within the Indonesian vocational school context.

Islamic Religious Education possesses a dual function: first, to transmit foundational Islamic knowledge, and second, to shape students' character, spirituality, and morality. Therefore, any pedagogical innovation, including gamification, must not only increase student motivation but also ensure the internalization of Islamic values. The rapid development of digital culture among Generation Z provides both an opportunity and a challenge. On one hand, students are familiar with digital games, competitions, badges, leveling systems, and instant feedback, making gamification potentially effective. On the other hand, teachers must ensure that game elements do not overshadow the core values embedded in Islamic teachings.

Against this backdrop, the present research investigates the implementation of gamification in PAI learning at SMK Muhammadiyah 1 Purbalingga. The study seeks to answer three central research questions: (1) How is gamification implemented in PAI learning? (2) How do students respond to this method? and (3) What are the supporting and inhibiting factors that influence its implementation? This study contributes to the growing literature on innovative PAI instruction and highlights the potential of gamification to enhance religious learning in vocational educational settings.

METHOD

This research employed a qualitative descriptive approach to explore the detailed processes and experiences associated with implementing gamification in Islamic Religious Education. The study was conducted at SMK Muhammadiyah 1 Purbalingga, involving one PAI teacher and a group of students from class X who actively participated in the gamified learning sessions. The qualitative design was chosen because it allows an in-depth examination of classroom dynamics, pedagogical interactions, student perceptions, and contextual factors that shape the implementation of gamification.

Data collection was carried out through observation, interviews, and documentation. Classroom observation focused on learning activities, the specific game

elements used, student engagement behaviors, and teacher strategies for integrating gamification into PAI lessons. Observations were conducted in multiple learning sessions to ensure data consistency and reliability. Semi-structured interviews were carried out with the PAI teacher to gain insights into instructional planning, pedagogical decisions, challenges faced, and reflections on the effectiveness of gamification. Interviews with students explored their emotional responses, motivational changes, learning experiences, and perceptions of the gamified classroom environment. Documentation included lesson plans, digital platform screenshots, assessment tools, learning modules, student worksheets, and photographs of classroom activities.

Data analysis followed the Miles and Huberman interactive model, consisting of data reduction, data display, and conclusion drawing. Data reduction involved selecting, simplifying, and organizing raw data into meaningful categories, particularly regarding the types of game elements used, student responses, and contextual factors. Data display was achieved by systematically arranging the findings into descriptive narrative form to facilitate interpretation. Conclusion drawing involved generating insights and verifying patterns through triangulation of data sources and methods. To ensure credibility, the researcher used methodological triangulation by comparing data from observations, interviews, and documents. This type of research has previously been carried out by many previous researchers, such as (Abdurrahman et al., 2025; Darlin Rizki, 2021; Darlin Rizki & Imron Rosyadi, 2019; Murad & Rizki, 2023; Rizki et al., 2022, 2025).

FINDINGS

Implementation of Gamification in PAI Learning

The implementation of gamification at SMK Muhammadiyah 1 Purbalingga was carried out through a well-planned integration of game elements into the structure of PAI lessons. The PAI teacher incorporated points, badges, leaderboards, quizzes, and group challenges to create a dynamic learning environment. The point system served as the foundation for student motivation, whereby learners accumulated points through participation, correct answers, timely submission of assignments, and successful completion of weekly challenges. These points contributed directly to students' overall performance and were visibly tracked on a digital leaderboard that displayed ranking updates in real time. Students reported that the leaderboard fostered a healthy sense of competition and strengthened their determination to improve.

Digital badges were another significant element that motivated students. These badges represented achievements such as "Hadith Master," "Aqidah Expert," or "Top Performer of the Week." Students expressed excitement when earning badges, as they symbolized recognition of their efforts and contributed to their digital learning identity. The teacher also implemented group missions, which required collaboration among students to solve problems related to Islamic teachings, such as moral dilemmas, historical analyses, or Quranic interpretation tasks. These collaborative challenges encouraged peer interaction, strengthened group solidarity, and enhanced critical thinking skills.

Interactive digital platforms such as Quizizz, Kahoot, and Google Classroom played a pivotal role in the implementation. These platforms provided instant feedback, colorful visuals, music, timed questions, and progress bars that made the learning experience more immersive. For instance, during a lesson on Islamic jurisprudence,

students engaged in a timed quiz competition where they had to choose the correct ruling based on real-life scenarios. The interactive nature of this activity increased students' alertness and comprehension.

Students' Responses to Gamification

Students demonstrated overwhelmingly positive responses toward the gamified learning approach. They described the learning atmosphere as more enjoyable, energetic, and motivating. Many students who previously felt disengaged during PAI lessons reported renewed interest and willingness to participate. The competitive elements, particularly points and leaderboards, stimulated their motivation to improve and perform better. Students also felt that gamification helped reduce boredom, making complex concepts more relatable through visual and interactive elements. Interview data revealed that students experienced a sense of achievement when they earned badges or rose in the leaderboard ranking, which contributed to their confidence and academic self-efficacy. Additionally, gamification encouraged shy students to participate more actively because they felt less intimidated in a playful environment.

Supporting Factors

Several factors supported the effective implementation of gamification. The teacher demonstrated strong commitment and creativity in designing gamified activities and integrating digital tools into PAI instruction. The school's digital infrastructure, including stable classroom projectors, Wi-Fi access, and availability of student devices, also facilitated implementation. Moreover, the school leadership encouraged teachers to adopt technology-based learning methods, which provided a conducive environment for innovation. Students' familiarity with digital platforms and their enthusiasm toward game-based activities significantly contributed to the success of gamification.

Inhibiting Factors

Despite the success, several challenges emerged. Digital literacy varied among students, creating disparities in participation and performance. Some students struggled with navigating digital platforms or managing timed quizzes. In addition, unstable internet connectivity occasionally disrupted activities, causing delays and reducing the flow of learning. Limited availability of devices posed challenges for students who did not own smartphones or whose devices were temporarily unusable. Time constraints during class sessions also made it difficult to complete certain gamified tasks, especially those involving group collaboration. The teacher expressed concerns that excessive focus on game elements could sometimes distract students from core learning objectives.

DISCUSSION

The results of this study provide strong evidence that the implementation of gamification in Islamic Religious Education (PAI) at SMK Muhammadiyah 1 Purbalingga serves as a significant pedagogical innovation capable of transforming conventional religious instruction into a more interactive, learner-centered, and motivational experience. This aligns with contemporary scholarship which emphasizes that gamification enhances students' intrinsic and extrinsic motivation by stimulating emotional engagement and cognitive participation through the integration of game elements such as rewards, badges, points, challenges, and feedback loops (Deterding et

al., 2011). The findings demonstrate that these game elements contribute to increased attention, enjoyment, and understanding among students, consistent with the argument that gamification strengthens learning outcomes by activating reward mechanisms in learners' cognitive frameworks (Kapp, 2012). When applied to religious learning contexts, such effects become particularly meaningful as students often face difficulties in interpreting abstract and normative Islamic concepts without engaging instructional strategies.

Furthermore, the learners' positive responses toward gamification reinforce the assumption that Generation Z students prefer visual, digital, and interactive forms of instruction that reflect their daily experiences with mobile technology, social media, and online games. Hamari, Koivisto, and Sarsa (2014) found that gamification is particularly effective for students who are familiar with digital competition, ranking systems, and reward-based tasks—characteristics strongly associated with today's adolescent learners. This is consistent with the experiences observed in this study, where students expressed enthusiasm toward leaderboards, time-bound quizzes, and collaborative missions that mirrored the mechanics of digital games they regularly play. In the PAI context, this heightened engagement not only improves cognitive understanding but also fosters emotional and behavioral involvement in learning Islamic principles, supporting the view that gamification contributes to affective domain development when designed appropriately (Zainuddin, 2019).

From a theoretical standpoint, the findings are consistent with the constructivist learning paradigm, which asserts that knowledge is not transmitted passively from teacher to student but actively constructed through interactive experiences, dialogic engagement, and meaningful reflection (Vygotsky, 1978). Gamification supports this process by positioning students as active participants who must make decisions, analyze problems, collaborate with peers, and adapt strategies to earn points or succeed in missions. The teacher becomes a facilitator rather than the primary transmitter of knowledge, shifting the learning climate from teacher-centered to student-centered. This transition is particularly beneficial in PAI learning, where students often benefit from contextual, experiential, and reflective approaches that help them internalize Islamic ethical principles in practical ways. Gamified activities such as scenario-based challenges allow students to interpret Islamic teachings within contemporary moral dilemmas, deepening their spiritual reasoning and ethical judgment.

Self-Determination Theory (SDT) further explains why gamification is effective in this context. SDT posits that human motivation increases when learning activities satisfy three psychological needs: autonomy, competence, and relatedness (Ryan & Deci, 2000). In this study, students experienced autonomy through the ability to choose strategies and manage their own progress in gamified tasks. They experienced competence through rewards, badges, and visible progress indicators that validated their efforts and encouraged continuous improvement. They felt relatedness through collaborative missions and group-based challenges that fostered social interaction. Together, these psychological conditions reinforce deeper and more sustained learning, confirming that gamification is not merely about adding entertaining elements but about designing learning environments that nurture motivation at a structural level.

Nevertheless, the study also illuminates critical challenges that must be addressed to maximize the pedagogical benefits of gamification. One of the most significant concerns is the disparity in students' digital literacy levels. Although many

students adapt quickly to gamified platforms, some experience difficulty navigating digital tools, managing timed quizzes, or understanding competitive mechanics. As Sujana (2020) notes, the success of digital-based learning innovations depends on equitable access and adequate digital skills among learners. Without proper scaffolding, gamification may unintentionally marginalize students with lower technological proficiency. In the observed implementation, students who lacked devices or had unstable internet connections were often unable to participate fully, which could potentially undermine the inclusivity and fairness of the learning experience.

Another potential issue concerns the risk of overemphasizing competition. While competitive elements such as leaderboards and rankings enhance motivation for many students, they can also generate anxiety, frustration, or disengagement for lower-performing individuals if not moderated carefully. Kapp (2012) cautions that poorly designed gamification systems may shift students' focus from learning goals to reward chasing, thereby reducing intrinsic motivation. In this study, the teacher mitigated these risks by integrating both cooperative and competitive elements, allowing students to experience collaboration in group challenges while still enjoying friendly competition. This balance is essential in PAI, where educational aims include fostering humility, cooperation, empathy, and moral development—values that can be undermined by excessive competitiveness.

Moreover, the findings suggest that gamification in Islamic Religious Education requires careful alignment with Islamic ethical and pedagogical principles. Islamic education emphasizes sincerity (*ikhlas*), moral intention (*niyyah*), and the development of virtuous character (*akhlaq*). If students become overly focused on points and badges, there is a possibility that these extrinsic motivators overshadow the intrinsic values of religious learning. Hence, the teacher must continuously emphasize that game mechanics are a vehicle for enhancing understanding, not the ultimate goal. Literature on religious pedagogy supports this concern, arguing that spiritual formation requires balanced cognitive, affective, and behavioral engagement (Abdullah, 2018). Gamification is effective when it stimulates engagement but must remain subordinate to the goal of nurturing religious identity and ethical character.

The technical challenges identified in the implementation—such as unstable internet connection and limited device availability—also reflect broader infrastructural constraints frequently encountered in Indonesian schools. These constraints highlight the need for institutional support, including improved technological resources, teacher training, and maintenance of digital facilities. According to educational technology research, the sustainability of digital innovations in schools depends heavily on systemic support rather than individual teacher effort alone (Ally & Wark, 2019). The findings of this study affirm this argument, as the teacher's creativity and commitment were substantial but required consistent technological backing to ensure long-term application.

Overall, this extended discussion shows that gamification holds substantial promise for modernizing Islamic Religious Education and responding to the learning preferences of Generation Z. However, successful implementation requires thoughtful, ethical, and pedagogically aligned design. The teacher must maintain equilibrium between game mechanics and religious values, ensure inclusivity for all learners, and continuously reflect on the educational aims of PAI. When implemented responsibly, gamification can strengthen not only intellectual mastery but also spiritual

understanding, ethical reflection, and collaborative character—elements that are central to holistic Islamic education.

CONCLUSION

This study concludes that the implementation of gamification in Islamic Religious Education at SMK Muhammadiyah 1 Purbalingga significantly enhances student motivation, engagement, and participation. Gamification elements such as points, badges, leaderboards, and interactive challenges effectively transform traditional PAI instruction into an interactive and enjoyable learning experience. Students respond positively to gamification, perceiving it as a refreshing and motivating approach that helps them better understand religious concepts. Supporting factors include teacher creativity, digital infrastructure, and student enthusiasm, while inhibiting factors involve digital literacy gaps, limited device availability, inconsistent internet access, and time constraints. Overall, gamification presents substantial potential for modernizing Islamic Religious Education and making it more relevant to the needs of Generation Z learners. The study recommends further development of teacher training programs, improved digital infrastructure, and pedagogical balancing to ensure optimal implementation.

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REFERENCES

Abdurrahman, A., Sudira, P., Hidayati, T., Rizki, D., & Dewi, A. K. (2025). CHINESE FAMILY EDUCATIONAL PATTERNS IN CULTIVATING ENTREPRENEURIAL SPIRIT: A THEMATIC ANALYSIS IN SURAKARTA. *JURNAL EKONOMI PENDIDIKAN DAN KEWIRAUSAHAAN*, *13*(2), 385–404. https://doi.org/10.26740/jepk.v13n2.p385-404

Bahri, K. (2023). *Pembelajaran berbasis gamifikasi dalam Pendidikan Agama Islam: Karakter dan moral individu dalam masyarakat.*

Darlin Rizki. (2021). ZIS (Zakat, Infaq And Alms) Funds Management Methods In Improving The Quality Of Mustahiq Life In BAZNAS Karanganyar. *AL-FALAH : Journal of Islamic Economics*, *6*(1), 19–39. https://doi.org/10.29240/alfalah.v6i1.2596

Darlin Rizki & Imron Rosyadi. (2019). *Analisis Faktor-Faktor Pengurang Zakat Pertanian Studi Kasus:(Petani di Desa Trucuk Kecamatan Trucuk Kabupaten Klaten)*.

Fauzi, N. A. (2025). Penerapan gamifikasi Powtoon dan Quizizz dalam meningkatkan motivasi belajar Akidah Akhlak siswa SMA Negeri 6 Palangka Raya. *Jurnal …*, 3(1), 331–343.

Fakultas Tarbiyah dan Keguruan UIN Raden … (n.d.). *Pengembangan bahan ajar gamifikasi bernuansa Islami dan lingkungan pada materi bangun datar tingkat SMP/MTs untuk meningkatkan pemahaman siswa.*

Hasyim, U. W. (2024). Dalam pembinaan profesional guru pendidikan agama. *Jurnal …*, 02, 583–604. https://doi.org/10.30868/im.v7i02.6452

Mahendra, C., Prabowo, R. E., Paath, D. K., Mili, W. N., & Annawati, B. D. (2023). Gamifikasi dalam Pendidikan STEM: Transformasi pembelajaran dan pemberdayaan siswa menuju Industri 5.0. *Inovasi Pendidikan Fisika*, 12(3), 92–100.

Murad, A. N., & Rizki, D. (2023). Development of Religious Moderation Study on Prevention of Radicalism in Indonesia: A Systematic Literature Review Approach. *POTENSIA: Jurnal Kependidikan Islam*, *8*(2), 198–124. https://doi.org/http://dx.doi.org/10.24014/potensia.v8i2.20727

Mahmubi, H. M. (2014). Analisis implementasi pembelajaran berbasis gamifikasi pada peningkatan motivasi belajar siswa. *Jurnal …*, 2(1), 286–294.

Muhyatun, M. (2019). Upaya preventif perilaku menyontek siswa melalui layanan dukungan sistem. *BELAJEA: Jurnal Pendidikan Islam*, 4(2). https://doi.org/10.29240/belajea.v4i2.891

Nooviar, M. S., Wahyuni, V. I., & Deviv, S. (2024). Transformasi pembelajaran: Menghidupkan keaktifan belajar siswa melalui strategi gamifikasi di sekolah dasar. *Edukatif: Jurnal Ilmu Pendidikan*, 6(3), 2865–2872. https://doi.org/10.31004/edukatif.v6i4.6992

Novita, N. N. I. (2023). Penguatan etika digital melalui materi "Adab Menggunakan Media Sosial" pada mata pelajaran Pendidikan Agama Islam dalam membentuk karakter peserta didik menghadapi era Society 5.0. *Journal of Education and Learning Sciences*, 3(1), 73–93. https://doi.org/10.56404/jels.v3i1.45

Philosophy, E., Putra, L. D., Hidayat, F. N., Izzati, I. N., Ramadhan, M. A., & Dahlan, U. A. (2024). *Alacrity: Journal of Education*, 4(3), 131–139.

Romadoni, M. D. (2016). Implementasi media pembelajaran gamifikasi Quizizz pada materi Pendidikan Agama Islam dalam meningkatkan motivasi dan interaksi siswa. *Jurnal …*, 2(1), 1–23.

Rizki, D., Fakhiroh, Z., Madani, R., Belakang, L., & Kerja, K. P. (2022). *Resepsi Masyarakat Muslim Terhadap Perpres No 10 Tahun 2021 Tentang Investasi Miras Di Indonesia*. *15*(1), 1–17.

Rizki, D., Fitri, F. A., & Ulmuftia, N. (2025). *Peran Media Sosial dalam Mendorong Perilaku Konsumen terhadap Boikot Produk Israel*. *5*(2), 72–81. https://doi.org/https://doi.org/10.31764/jseit.v5i2

Rosa, E., Destian, R., Agustian, A., & Wahyudin, W. (2024). Inovasi model dan strategi pembelajaran dalam implementasi Kurikulum Merdeka. *Journal of Education Research*, 5(3), 2608–2617. https://doi.org/10.37985/jer.v5i3.1153

Safroni, S., & Hidayah, U. (2024). Strategi pembelajaran Pendidikan Agama Islam berbasis gamifikasi untuk meningkatkan motivasi belajar siswa. *Al-Muaddib: Jurnal Kajian Ilmu Kependidikan*, 6(1), 424–436.

Saleh, S. (2017). *Analisis data kualitatif*. Bandung: Pustaka Ramadhan. https://core.ac.uk/download/pdf/228075212.pdf

Sofwatillah, Risnita, Jailani, M. S., & Saksitha, D. A. (2024). Teknik analisis data kuantitatif dan kualitatif dalam penelitian ilmiah. *Journal Genta Mulia*, 15(2), 79–91.

Spradley, P., & Huberman, M. (2024). Kajian teoritis tentang teknik analisis data dalam penelitian kualitatif. *Jurnal …*

Viranny, & Wardhono. (2024). *Cendekia Pendidikan*, 4(4), 50–54. https://doi.org/10.9644/sindoro.v3i9.252

Zainuddin, Z., Chu, S. K. W., Shujahat, M., & Perera, C. J. (2020). The impact of gamification on learning and instruction: A systematic review of empirical evidence. *Educational Research Review*, 30. https://doi.org/10.1016/j.edurev.2020.100326

Authors' Brief CV

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