

Improving Students' Learning Motivation in Islamic Religious Education: A Collaborative Learning Management Approach Based on Games and Flashcards

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Abstract

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This study aims to analyse the effectiveness of the Game-Based Learning (GBL) model combined with flashcard media in increasing student learning motivation in Islamic Religious Education subjects. This study is based on constructivist theory and learning motivation theory, which emphasises the importance of active involvement, enjoyable learning experiences, and providing challenges as drivers of students' intrinsic motivation. The study used a mixed methods approach with a convergent design, involving 33 grade 10 students as research subjects. Quantitative data were obtained through learning motivation observation sheets using a Likert scale, while qualitative data were collected through direct observation of student activities during the learning process. The results showed that the application of Game-Based Learning assisted by flashcard media was able to significantly increase student learning motivation, indicated by 82% of students who were in the high and very high motivation categories after the intervention. In addition, game-based learning was able to increase active participation, enthusiasm, group collaboration, and student courage in expressing opinions during the learning process. The novelty of this study lies in the integration of the Game-Based Learning model with flashcard media implemented in the context of Islamic Religious Education learning in Pesantren-based vocational schools. This combination produces a learning strategy that not only increases learning motivation but also creates a more interactive, collaborative, and enjoyable learning experience, so that it has the potential to become an innovative learning model that is relevant for application in Islamic educational institutions.

Kata Kunci:

Manajemen Pembelajaran
Berbasis Permainan, Kartu
Kilas, Motivasi Belajar,
Pendidikan agama Islam

Abstrak

Penelitian ini bertujuan menganalisis efektivitas penerapan model Game-Based Learning (GBL) yang dipadukan dengan media flashcard dalam meningkatkan motivasi belajar siswa pada mata pelajaran Pendidikan Agama Islam. Penelitian ini berlandaskan pada teori konstruktivisme dan teori motivasi belajar yang menekankan pentingnya keterlibatan aktif, pengalaman belajar yang menyenangkan, serta pemberian tantangan sebagai pendorong motivasi intrinsik peserta didik. Penelitian menggunakan pendekatan mixed methods dengan desain convergent, melibatkan 33 siswa kelas X sebagai subjek penelitian. Data kuantitatif diperoleh melalui lembar observasi motivasi belajar menggunakan skala Likert, sedangkan data kualitatif dikumpulkan melalui observasi langsung terhadap aktivitas siswa selama proses pembelajaran. Hasil penelitian menunjukkan bahwa penerapan Game-Based Learning berbantuan media flashcard mampu meningkatkan motivasi belajar siswa secara signifikan, ditunjukkan oleh 82% siswa yang berada pada kategori motivasi tinggi dan sangat tinggi setelah intervensi. Selain itu, pembelajaran berbasis permainan mampu meningkatkan partisipasi aktif, antusiasme, kolaborasi kelompok, serta keberanian siswa dalam menyampaikan pendapat selama proses pembelajaran berlangsung. Kebaruan (novelty) penelitian ini terletak pada integrasi model Game-Based Learning dengan media flashcard yang diimplementasikan

dalam konteks pembelajaran Pendidikan Agama Islam di SMK berbasis pesantren. Kombinasi tersebut menghasilkan strategi pembelajaran yang tidak hanya meningkatkan motivasi belajar, tetapi juga menciptakan pengalaman belajar yang lebih interaktif, kolaboratif, dan menyenangkan, sehingga berpotensi menjadi model pembelajaran inovatif yang relevan untuk diterapkan pada lembaga pendidikan Islam.

INTRODUCTION

Motivation becomes one of the essential and fundamental factors that encourage students to develop the desire to enhance the quality of their learning, ensuring that learning objectives can be achieved. Students with high learning motivation will be serious and enthusiastic in learning. They will seek various ways to optimise their learning activities. Through good learning motivation, students can achieve better learning outcomes (Andriani & Rasto, 2019; Mahdi & Hamdani, 2025). Therefore, motivation is essential in the learning process. However, the reality in the field does not align with the theory. Based on observations conducted by the researcher in the 10th grade at SMKS Al-Mahrusiyah, most students still exhibit low learning motivation in Islamic Religious Education (IRE). During lessons, they do activities unrelated to the learning process. Only a few students sit quietly and focus on the teacher's presentation of the material. Meanwhile, the majority are seen chatting with their seatmates. Some students also appear drowsy (Dani et al., 2023; Permatasari & Sujarwati, 2023).

Based on the statement of a student from the 10th grade at SMKS Al-Mahrusiyah that she often sleeps during lessons because he gets bored listening to the teacher's lectures in class, this indicates the need for improvement in the teacher's teaching methods. This is consistent with the findings of (Faristin et al., 2023), which states that one factor influencing low student motivation is that learning activities are not interesting. Similarly, (Wahyuni & Bhattacharya, 2021) found that a lack of variety in strategies and methods in IRE teaching-learning can also diminish students' motivation to learn the subject. This is further supported by the researcher's field observations, which show that the teaching methods employed by the teacher are still traditional and lack engagement, resulting in low student motivation. During the learning process, the teacher predominantly narrates and delivers material verbally (Ramadhan et al., 2023).

The low level of student learning motivation in Islamic Religious Education (PAI) subjects cannot be separated from the implementation of a learning approach that is still teacher-centred, thereby limiting students' autonomy, active participation and involvement in constructing an understanding of religious material. Various studies show that Game-Based Learning (GBL) can increase student participation, enthusiasm and involvement during the learning process. (Khairani & Albina, 2025), while the use of flashcard media has proven to be effective in strengthening memory and understanding of conceptual material (Ramadhan et al., 2023). However, previous research generally still studies GBL and flashcards separately or focuses more on the development of digital-based learning media, so that studies regarding the integration of the two in PAI learning, especially in Islamic boarding school-based environments, are still very limited (Dani et al., 2023; Permatasari & Sujarwati, 2023).

This research gap became the basis for conducting this research by testing the effectiveness of the integration of the Game-Based Learning model assisted by interactive flashcard media in increasing student learning motivation at Al-Mahrusiyah Vocational School (Azizah et al., 2025; Muflihah et al., 2024). The novelty of this research lies in the development of a learning syntax that integrates elements of collaborative competition in GBL with the visual

power of flashcard media to encourage students' intrinsic motivation in the context of Islamic Religious Education learning in Islamic boarding school-based schools (Faristin et al., 2023). The game-based learning model can be a solution to address issues related to students' learning motivation. Game-based learning is one of many types of learning models. In its implementation, students form groups to play games with other team members to earn scores for their respective teams (Anisa et al., 2022).

In several previous studies, the game-based learning model successfully improved students' interest in learning and academic outcomes (Azizah et al., 2025; Muflihah et al., 2024). To support and maximise the implementation of the game-based learning model, researchers also utilise flashcard learning media. Flashcards are instructional media in the form of cards that may contain images or text (Akbar, 2022). The use of flashcards as a learning medium has also been proven to increase students' learning motivation (Anisa et al., 2022). This study uses a mixed methods approach because learning effectiveness needs to be measured not only through increasing student learning motivation, but also through their learning process and experiences during the learning process. Thus, this study is expected to provide a more comprehensive understanding of the effectiveness of the implementation of this learning model and become an alternative innovative learning strategy in Islamic Religious Education in Islamic boarding schools.

METHOD

This study used a convergent mixed methods design. Quantitative and qualitative data collected simultaneously. The data were analysed separately and then compared to determine whether the findings aligned and reinforced one another or showed contradictions (Creswell & Creswell, 2018). Observations were conducted by researchers by recording student engagement, responses, and interactions during the Game-Based Learning-based learning process using flashcards, supported by field notes for analysis. (Ishtiaq, 2019). Meanwhile, quantitative data were collected using a 4-point Likert scale questionnaire. Student learning motivation was measured based on indicators of achievement drive, learning commitment, initiative, and optimism (Creswell & Creswell, 2018).

The instrument validity test was conducted using data from 33 students who were also the research subjects. The use of the same sample in the validity test and the implementation of the research was carried out due to the limited number of class X at SMK Al-Huda Kediri, which has similar characteristics, so that it is not possible to conduct a trial of the instrument in other classes. To minimise the potential for bias, the instrument was compiled based on learning motivation indicators that have been validated in theoretical studies and previous research, then reviewed by experts (expert judgment) before being used in the study (Goleman, 2004). The test results showed that all items had a Corrected Item–Total Correlation value greater than the r table value (0.344), so all items were declared valid and suitable for use as a research instrument.

Table 1. Validity Test

Indicators	Aspects	r-calculated (Corrected Item-Total Correlation)	r-table $\alpha=0,05$, N=33	Validity Status
Achievement Drive	Striving to improve the standard of achievement	0,645	0,344	Valid
	Meet a standard of achievement	0,589	0,344	Valid
Commitment	Embracing the group's vision	0,712	0,344	Valid
	Embracing the group's goals	0,630	0,344	Valid
Initiative	Seizing the opportunities	0,688	0,344	Valid
	Pursue goals beyond what's required	0,554	0,344	Valid
Optimism	Persist in seeking goals	0,741	0,344	Valid
	See setbacks as due to manageable circumstances	0,615	0,344	Valid

Source: Data Collection, 2026

Table 2. Reliability Test

Cronbach's Alpha	Validity Status
0,865	Reliable

Source: Data Collection, 2026

Table 1 indicates that each aspect measured in the questionnaire is valid. This is based on the respective r-calculated values, all of which exceed 0,344, as the standard value for the r-table. Meanwhile, Table 2 shows that the Cronbach's Alpha value is 0.865, which exceeds the 0,6 threshold used to determine whether an instrument is reliable overall. Students' learning motivation was categorised based on their individual scores, with the following table 3 description:

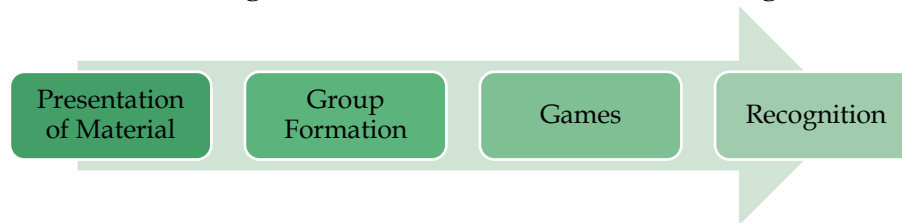
Table 3. Categories of Learning Motivation

Score Interval	Categories
26-32	Very High
20-25	High
14-19	Low
8-13	Very Low

Source: Data Collection, 2026

In its implementation, this study followed several stages aligned with the syntax of the game-based learning model. (Wulandari & Safitri, 2024). *First*, during the material presentation stage, students were provided with the material titled "*Biography and History of Walisongo*" In this stage, the material was explained communicatively, allowing students to ask questions and explore information extensively from learning resources. *Second*, in the group formation stage, students were divided into small groups consisting of 4-5 members.

During this phase, they exchanged information and learned together to prepare for the game stage. *Third*, in the game stage, students competed in groups against other groups to collect as many points as possible. They worked collaboratively to guess the correct answers based on the keywords provided on the flashcards. *Fourth*, in the recognition stage, the group that collected the most points received a reward. At this stage, providing positive reinforcement was essential.

Figure 1. Procedure of Game-based Learning

The flashcard media used in the learning process contains text and images. The flashcards created refer to key terms from the biography and history of Walisongo.

Figure 2. Flashcard Learning Media

RESULT AND DISCUSSION

Result

Based on the observations, the researchers found that students' learning motivation was low, as indicated by their lack of attention to the teacher's explanations during lessons, lack of persistence in completing assignments, and low enthusiasm in solving problems. This finding is also consistent with the quantitative observation data presented in the table below:

Table 4. Students' Learning Motivation before the Intervention

Score Interval	Categories	Student Frequency	Percentage (%)
26-32	Very High	1	3,03%
20-25	High	7	21,21%
14-19	Low	22	66,66%
8-13	Very Low	3	9,1%

Source: Data Collection, 2026

Based on the data in the table above, it can be visualised in the following diagram:

Figure 3. Students' Learning Motivation before the Intervention

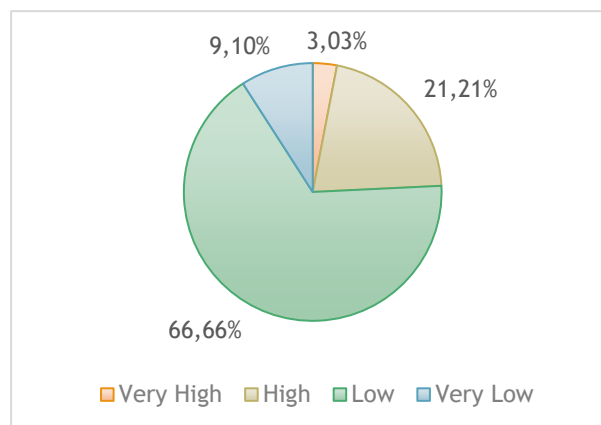


Figure 3 shows that students' learning motivation falls significantly short of the researchers' expectations. Only 3% or 1 student is in the very high category, 21% or 7 students are in the high category, 67% or 22 students are in the low category, and 9% or 3 students are in the very low category. This means that only 28% of students have high or very high learning motivation, while the majority still have low or very low motivation.

Implementation of Game-Based Learning and Flashcards in Learning

After the intervention involving the implementation of game-based learning and flashcards, the researchers observed an increase in students' learning motivation. The interval scores from the observations are detailed in the table below:

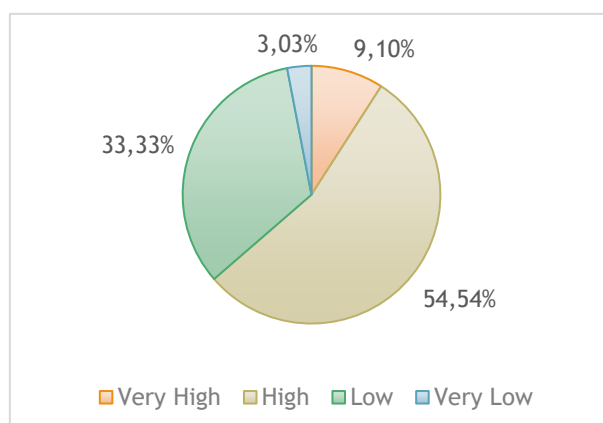
Table 5. Students' Learning Motivation in the First Intervention

Score Interval	Categories	Student Frequency	Percentage (%)
26-32	Very High	3	9,1%
20-25	High	18	54,54%
14-19	Low	11	33,33%
8-13	Very Low	1	3,03%

Source: Data Collection, 2026

The interval score data for students' learning motivation in Intervention 1 is visualised in the following diagram:

Figure 4. Students' Learning Motivation in the First Intervention



Based on the diagram from Intervention 1, there were several increases in learning motivation, which can be detailed as follows:

- In the very high category, there were 3 students (9,1%), an increase from 1 student (3,03%) before the intervention.
- In the high category, there were 18 students (54,54%), an increase from 7 students (21,21%) before the intervention.
- In the low category, there were 11 students (33,33%), a decrease from 22 students (66,66%) before the intervention.
- In the very low category, there was 1 student (3,03%), a decrease from 3 students (9,1%) before the intervention.

Based on these findings, it is evident that there was an increase in students' learning motivation. This aligns with the researchers' classroom observations, where students paid close attention throughout the lesson. None of the students was found sleeping in class, and they were able to participate in the learning activities. However, some students still felt shy and hesitant to engage actively due to unfamiliarity with the new learning model. To maximise the results of the intervention using the game-based learning model and flashcards, the researchers conducted a second intervention. The same model and media were used, with improvements based on the results of the first intervention.

In the second intervention, the researchers prepared the classroom earlier to ensure that the learning activities could begin on time, as the implementation of game-based learning requires a longer duration. Additionally, the researchers strived to deliver the lessons more interactively and communicatively, enabling students to actively participate without feeling shy or reluctant. The interval scores from the observations during the second intervention are detailed in Table 4 below:

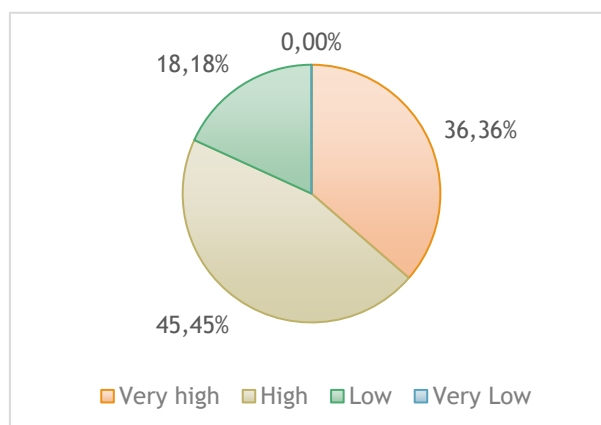
Table 6. Students' Learning Motivation in the Second Intervention

Score Interval	Categories	Student Frequency	Percentage (%)
26-32	Very High	12	36,36%
20-25	High	15	45,45%
14-19	Low	6	18,18%
8-13	Very Low	0	0%

Source: Data Collection, 2026

The interval score data for students' learning motivation in Intervention 2 is visualised in the following diagram:

Figure 5. Students' Learning Motivation in the Second Intervention



Based on the diagram from Intervention 2, there was an improvement in learning motivation, which can be detailed as follows:

- In the very high category, there were 12 students (36,36%), an increase from 3 students (9,1%) in Intervention 1.
- In the high category, there were 15 students (45,45%), a decrease from 18 students (54,54%) in Intervention 1.
- In the low category, there were 6 students (18,18%), a decrease from 11 students (33,33%) in Intervention 1.
- In the very low category, there were no students (0%), a decrease from 1 student (3,03%) in Intervention 1.

These findings align with qualitative observations, indicating that students actively participated in the learning process, sought clarification by asking questions about unclear material, and demonstrated dedication when completing tasks.

Game-Based Learning and Flashcards in Enhancing Students' Learning Motivation

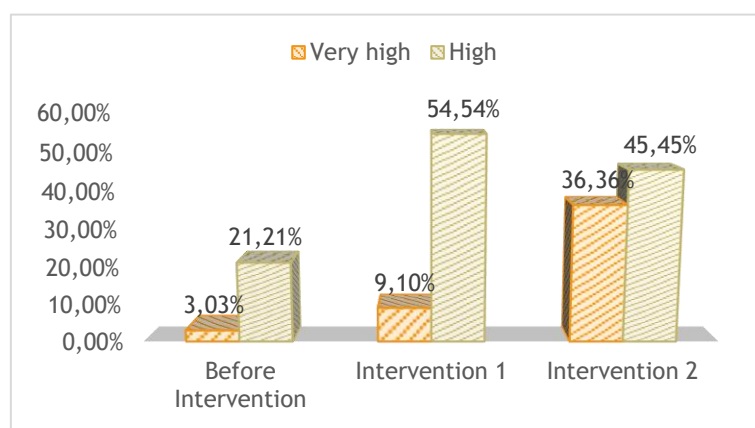
Based on the collected data from before the intervention to the second intervention, there was a significant increase in students' learning motivation, with 82% of students falling into the high and very high categories.

Table 7. The Improvement of Students' Learning Motivation

Score Interval	Categories	Before Intervention		Intervention 1		Intervention 2	
		Student	%	Student	%	Student	%
26-32	Very High	1	3,03%	3	9,1%	12	36,36%
20-25	High	7	21,21%	18	54,54%	15	45,45%
Total		8	24,24%	21	63,64%	27	81,81%

Source: Data Collection, 2026

Figure 6. The Progress of Students' Learning Motivation



From the table and histogram results, it is evident that there was an increase in students' learning motivation with each intervention. Before the intervention, there were 8 students (24,24%) in the high and very high categories. After Intervention 1, this increased to 21 students (63,64%) in the high and very high categories, then increased again to 27 students (81,81%) after Intervention 2 in the same categories. Thus, it can be concluded that the implementation of game-

based learning with flashcards was able to improve the learning motivation for IRE among 10th-grade students at SMKS Al-Mahrusiyah.

This is also consistent with the researchers' classroom observations. Before the implementation of game-based learning with flashcards, students were passive during lessons, showed low curiosity, talked with their seatmates during class, and some even slept during the lesson. However, after the implementation, students became more enthusiastic about asking questions and seeking information, demonstrated diligence in their learning, and paid close attention during lessons.

Table 8. Joint Display Matrix for the Integration of Quantitative and Qualitative Data

Motivation Indicators	Quantitative Findings	Qualitative Findings	Integration Results
Achievement Drive	The percentage of pupils with high and very high levels of motivation rose from 24.24 per cent before the intervention to 81.81 per cent after Intervention 2.	Most of the pupils showed enthusiasm for completing the game's challenges, actively answered questions, and tried to achieve the highest score for their group.	Competition in game-based learning encourages pupils to strive for higher achievement.
Commitment	There has been an improvement in pupils' consistency in participating in all stages of the learning process.	All members of the group worked together to complete the game, discussed the material, and helped one another to understand the content on the flashcards.	Collaborative activities strengthen pupils' commitment to the group's learning objectives.
Initiative	Motivation scores increased gradually with each intervention.	During the second session, the pupils began to take the initiative to ask questions, offer answers without being asked, and look for additional information on the cards they were using.	Flashcards provide visual stimuli that encourage independent learning.
Optimism	There were no longer any pupils in the 'very low motivation' category in Intervention 2.	The pupils seemed more confident taking part in the game; they didn't give up easily when they got an answer wrong, and kept trying to score points in the next round.	An enjoyable learning experience fosters optimism and self-confidence in pupils' study of Islamic Education.

Source: Data Collection, 2026

The results of integrating quantitative and qualitative data indicate that the increase in student learning motivation is reflected not only in higher observation scores but also in behavioural changes during the learning process. Quantitative data show an increase in the number of students in the high and very high motivation categories from 24.24% before the intervention to 81.81% after the second intervention.

These findings are reinforced by the results of field observations that show that students are more enthusiastic about participating in learning, actively discussing, daring to ask questions, working together in groups, and showing persistence in completing each game challenge. Thus,

both types of data confirm and complement each other, thus providing a more comprehensive understanding of the effectiveness of the integration of Game-Based Learning and flashcard media in increasing motivation to learn Islamic Religious Education.

DISCUSSION

The results of the study indicate that the implementation of Game-Based Learning assisted by flashcard media can significantly increase student learning motivation. Quantitatively, the number of students in the high and very high motivation categories increased from 24.24% before the intervention to 81.81% after the second intervention, with the very high category increasing from 3.03% to 36.36%. From a convergent mixed-methods perspective, these findings are reinforced by field observations that show changes in student learning behaviour during the learning process.

While before the intervention some students appeared sleepy, talked with their deskmates, and paid less attention to the teacher's explanations, during the second intervention these behaviours were almost absent. Instead, students appeared more active in discussions, asking questions when experiencing difficulties, helping each other in groups, and showing enthusiasm in completing each game challenge. The integration of these two types of data shows that the increase in learning motivation is not only reflected in changes in quantitative scores, but also in changes in learning behaviour that indicate increased cognitive, emotional, and social engagement of students during learning.

Learning motivation plays a crucial role in education. According to (Nihaya, 2024) and (Octavia, 2020) Motivation acts as a driver, a mover, and a guide for action. As a driver, motivation pushes students to learn IRE out of curiosity about what they do not yet know. As a mover, motivation encourages students to engage wholeheartedly in learning activities. As a guide, it directs students toward actions that support their learning goals to achieve what they desire. Factors influencing learning motivation include family environment, peer relationships, and students' interests (Mukti & Wijanarka, 2024). Meanwhile, (Sunawir et al., 2024) and (Wahyudi & Kurniasih, 2020) Classify these factors into internal and external ones. Internal factors include personal goals, self-confidence, physical and mental health, and talents and interests. External factors include the learning environment, social support, teaching methods, opportunities for achievement, feedback, and rewards.

These findings align with the concept of learning motivation proposed, which encompasses four main indicators: achievement drive, commitment, initiative, and optimism. Increased achievement drive is reflected in students' enthusiasm for achieving the highest scores and completing each game challenge (Goleman, 2004). Commitment is evident through increased collaboration among students within groups to achieve shared goals. Furthermore, initiative is demonstrated by students' courage to ask questions, provide opinions, and seek solutions when facing difficulties during the game. These findings can also be explained through Maslow's hierarchy of needs theory. Game-based learning creates a safe and enjoyable learning environment (safety needs) (Aiman et al., 2022; Rahmadania & Aly, 2023), strengthens interactions between students through group work (love and belonging), and provides recognition for group success through healthy competition (esteem needs).

Previous research also indicates that game-based learning can effectively enhance students' learning motivation. In this study, an increase of 81.81% in students with high and very high motivation was accompanied by behavioural changes, including increased questioning skills and

group collaboration. This finding corroborates research by (Sugianto, 2023) and (Jääskä et al., 2022), which found that GBL can enhance students' sustained learning engagement. (Muflihah et al., 2024) In their study, they compared different learning models, such as group learning, peer tutoring, and game-based learning. The results demonstrated that game-based learning is more effective in improving the learning process compared to other teaching models.

Flashcards as a learning medium also positively impact increasing students' learning motivation. (Fauziyyah et al., 2024) found that flashcards can present material engagingly and enjoyably, motivating students to learn. Flashcards are a form of visual media used in education. (Ilham, 2021) explained that visual media, such as images or text on flashcards, positively influence students' learning motivation. In addition to enhancing motivation, flashcards are also effective for improving memory retention. Flashcards facilitate enjoyable learning experiences, allowing students to feel more at ease during the learning process. (Sholeh et al., 2024) Further emphasised that using flashcards tailored to the material's concepts helps students memorise and understand key terms or concepts in a structured and engaging way. However, they also highlighted challenges in implementing flashcards in teaching, such as limited time for creating and using these tools (Muttaqin & Fauji, 2024).

The collaboration of game-based learning and flashcards is suitable for the characteristics of history material, which tends to be narrative, chronological, and requires contextual understanding to connect past events with the present life. (Darmalinda & Fadriati, 2024) explain that history learning requires students to understand the sequence of events and the meaning behind each event, while exploring values that can be implemented in daily life. The dense nature of history content often makes it difficult for students, especially when memorising important names, places, and dates. The game-based learning model, which emphasises recognition, also contributes to an increase in student motivation. (Maizari et al., 2024) Their study found that providing rewards such as praise and gifts significantly increases student motivation. According to (Akmal & Susanti, 2019) Giving rewards to students can have a positive impact, such as boosting students' enthusiasm for learning. However, they also revealed that giving rewards too frequently or excessively can cause students to become complacent and arrogant.

However, in the implementation process, the researcher also found that some students still feel shy or reluctant to actively participate during the game-based learning sessions. According to (Risanatul & Junaidi, 2022) Their study identified several factors that cause students to be unwilling to participate actively in learning, including: fear or embarrassment of being laughed at by peers, lack of understanding of the material, students being unwell, students thinking about other things during the lesson, and students not being adequately prepared before the lesson. According to (Ningsih & Berek, 2023) To address this, teachers can employ several strategies, such as providing motivational messages, using varied methods, utilising learning media, conducting group discussions, offering appropriate praise, providing grades or scores, creating a pleasant atmosphere, and assigning tasks to students.

The high workload and responsibilities of students in Islamic boarding schools also contribute to a decrease in learning motivation. Students in these environments are not only faced with academic tasks in formal schools but also have to fulfil various obligations related to religious studies, religious activities, and other responsibilities at the Islamic boarding school (Aprilia et al., 2022). This excessive workload can cause students to feel physically and mentally exhausted, which in turn reduces their energy and focus for learning. This aligns with the findings of (Puspitasari & Affandi, 2024), which found that academic stress and cognitive load significantly affect students'

learning motivation. This situation not only affects learning motivation but also decreases their academic performance, such as exam results or engagement in classroom learning (Achor et al., 2022). High workloads often trigger stress and fatigue in students, which negatively impacts their motivation to learn. The limitations of time and the demands of multitasking often make it difficult for students to allocate sufficient attention to formal learning.

Islamic boarding schools have a unique culture that distinguishes them from other formal educational institutions. Students are prohibited from bringing mobile phones or other digital devices (Aprilia & Sufirmansyah, 2025). However, laptops may be operated under strict supervision and limited usage (Aprilia et al., 2023; Aprilia & Munifah, 2022). This restriction is intended to maintain students' focus on learning and prevent distractions often caused by electronic devices. Nevertheless, this rule also brings certain impacts and challenges to the learning process. Teachers, in particular, face limitations in implementing innovative teaching methods. Models like Game-Based Learning, which combine elements of games and visuals, could be a solution to rebuild students' learning motivation in a fun way without further burdening them. However, it must still comply with the regulations of the Islamic boarding school.

The collaborative model of Game-Based Learning and flashcards can serve as an alternative teaching approach highly relevant for Islamic boarding school-based schools. This learning model also addresses the limitations of technology access (Khoiriyati & Sufirmansyah, 2024). In the long term, such collaborative learning can be an innovative solution to ensure that students still gain a rich and profound learning experience, even in an environment that restricts the use of electronic devices. With the support of creative and dedicated teachers, this model can not only be applied to IRE but also be adapted to various topics and learning needs, thus creating a sustainable, positive impact (Sufirmansyah, 2025).

The use of game-based learning with flashcards has a positive impact because these two approaches complement each other. Game-based learning encourages active participation through healthy competition and group collaboration, while flashcards serve as visual learning tools that help students remember and understand the material better. Previous studies by (Anisa et al., 2022) have also demonstrated that the use of flashcards can improve learning motivation. Thus, combining these two strategies not only increases student engagement during lessons but also enhances the delivery of material, making students more focused and enthusiastic.

So, this research makes a significant contribution to developing innovative learning models relevant to the challenges of education and amid social change. The collaboration between game-based learning and flashcards has proven to increase students' motivation and interest in learning, suggesting its potential for broader application across various subjects and educational levels. These findings strengthen the argument that innovation in teaching strategies is essential to address classic problems in education, such as student passivity and lack of material comprehension. This approach not only supports the policies and unique culture of pesantren, which prohibit the use of electronic devices, but also provides an active and interactive learning experience. Despite the limitations of a non-digital environment, this method upholds the essential and meaningful essence of education.

CONCLUSION

This study demonstrates that the collaboration between Game-Based Learning and flashcards effectively increases student motivation in Islamic Religious Education at SMKS Al-Mahrusiyah. Quantitatively, 81.81% of students achieved high and very high motivation after the

second intervention. This is supported by qualitative findings showing increased active participation, enthusiasm, cooperation, and students' courage in asking questions during the learning process. These findings confirm that the combination of Game-Based Learning and flashcards is a low-tech (non-digital) learning innovation capable of creating a more interactive, enjoyable, and effective learning environment, while remaining in line with Islamic boarding school regulations that restrict the use of digital devices.

This research's contribution lies in providing an alternative, innovative learning model relevant to educational challenges in Islamic boarding schools. The integration of Game-Based Learning and flashcards not only supports increased student motivation but also provides a practical solution for teachers to deliver active learning without relying on digital technology. This model has the potential to be adapted to various subjects and educational levels with similar characteristics. This study was limited by its relatively short intervention duration, limited sample size, and limited implementation in a single school. Therefore, further research is recommended involving a broader and more diverse sample, extending the intervention period, and examining other variables such as learning outcomes, conceptual understanding, material retention, and the influence of the learning environment on student motivation.

REFERENCES

- Achor, S. Z., Zaria, L. I., & Achor, E. E. (2022). Perceived cognitive load and students' performance in social studies. *Journal of Research in Instructional*, 2(2), 129–140. <https://doi.org/10.30862/jri.v2i2.74>
- Aiman, G., Arifi, A., & Maryono, M. (2022). Perspektif Humanistik Abraham Maslow untuk Menumbuhkan Karakter Siswa di Sekolah Menengah Atas. *Scaffolding: Jurnal Pendidikan Islam Dan Multikulturalisme*, 4(3), 349–358. <https://doi.org/10.37680/scaffolding.v4i3.2092>
- Akbar, Muh. R. (2022). *Flash card sebagai Media Pembelajaran dan Penelitian*. CV Haura Utama.
- Akmal, S., & Susanti, E. (2019). Analisis Dampak Penggunaan Reward dalam Pembelajaran Pendidikan Agama Islam di SMA Muhammadiyah Aceh Singkil. *Jurnal Ilmiah DIDAKTIKA*, 19(2), 159–177.
- Andriani, R., & Rasto. (2019). Motivasi Belajar sebagai Determinan Hasil Belajar Siswa. *Jurnal Pendidikan Manajemen Perkantoran*, 4(1), 80–86. <https://doi.org/10.17509/jpm.v4i1.14958>
- Anisa, N., Anggela, R., & Rosanti. (2022). Peningkatan Hasil Belajar dan Motivasi Siswa Menggunakan Media Flashcard pada Materi Konsep Dasar Geografi di Kelas X SMAN 01 Selakau Kabupaten Sambas. *Geo Khatulistiwa: Jurnal Pendidikan Geografi Dan Parawisata*, 2(3), 2808–2974.
- Aprilia, T. H., Masrof, A. H., & Humaidi, A. (2022). Pesantren In Social Construction Perspective (The Educational Orientation Of The Sidogiri Pesantren). *Tarlim : Jurnal Pendidikan Agama Islam*, 5(2), 139–157. (discourse analysis). <https://doi.org/10.32528/tarlim.v5i2.7903>
- Aprilia, T. H., & Munifah, M. (2022). Manifestation Of Prophetic Leadership Values In Islamic Education. *Tadbir: Jurnal Studi Manajemen Pendidikan*, 6(2), 273–285. <https://doi.org/10.29240/jsmp.v6i2.4896>
- Aprilia, T. H., & Sufirmansyah, S. (2025). Santri and the Digital Divide: (The Upheaval of Pesantren Over Technological Developments in Cultural Lag Perspective). *Briliant: Jurnal Riset Dan Konseptual*, 10(3), 581–592. <https://doi.org/10.28926/briliant.v10i3.2215>

- Aprillia, T. H., Masrof, A. H., Ahid, N., & Huda, S. (2023). Pesantren and Tradition (Study Of Ta'dzim Affiliates in Character Education Al-Ghazali and Thomas Lickona). *Edukasi Islami: Jurnal Pendidikan Islam*, 12(01). <https://doi.org/10.30868/ei.v12i01.2738>
- Azizah, A. A., Azizah, N., Asiah, N., & Fakhri, J. (2025). Learning Interest: How Does the Effective of the Game-Based Learning and Team Games Tournament Models? *Jurnal Pendidikan Dan Pembelajaran Indonesia*, 5(1), 103–117.
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design (Qualitative, Quantitative, and Mixed Methods Approaches)* (5th ed.). SAGE Publications, Inc.
- Dani, D. E. R., Shaleh, & Nurlaeli. (2023). Variasi Metode dan Media Pembelajaran dalam Kegiatan Belajar Mengajar. *Al-Madrasah: Jurnal Ilmiah Pendidikan Madrasah Ibtidaiyah*, 7(1), 372–379. <https://doi.org/10.35931/am.v7i1.1829>
- Darmalinda, & Fadriati. (2024). Pembelajaran Sejarah Kebudayaan Islam (Analisis Konsepsi, Tujuan, Materi, Strategi, dan Evaluasi Pembelajaran). *Al-Hasanah: Jurnal Pendidikan Agama Islam*, 9(1), 92–107.
- Faristin, V. A., Ismanto, H. S., & Venty. (2023). Faktor-Faktor yang Mempengaruhi Motivasi Belajar Siswa SMA. *Jurnal Psikoedukasia*, 1(1), 125–153.
- Fauziyyah, L. N. F., Agustina, S. R. E., Syarofani, M., Novita, A., & Fadzil, H. B. M. (2024). Development of Flashcard Learning Media to Increase Learning Motivation to Memorize Juz 29 in the Al- Qur ' an Educational Institute. *Tadris: Jurnal Pendidikan Islam*, 19(1), 26–43. <https://doi.org/10.19105/tjpi.v19i1.10551>
- Goleman, D. (2004). *Emotional Intelligence*. Bloomsbury Publishing Plc.
- Ilham. (2021). Pengaruh Rekayasa Media Visual terhadap Motivasi Belajar Siswa dalam Pembelajaran PAI pada SMAN Unggul Aceh Besar. *Fitrah*, 3(2), 1–23.
- Ishtiaq, M. (2019). Book Review Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA: Sage. *English Language Teaching*, 12(5), 40. <https://doi.org/10.5539/elt.v12n5p40>
- Jääskä, E., Lehtinen, J., Kujala, J., & Kauppila, O. (2022). Game-Based Learning and Students Motivation in Project Management Education. *Project Leadership and Society*, 3, 1–13. <https://doi.org/10.1016/j.plas.2022.100055>
- Khairani, L., & Albina, M. (2025). Kahoot-Based Learning and Students' Critical Thinking in Islamic Education. *Academia Open*, 10(2), 10.21070/acopen.10.2025.12840-10.21070/acopen.10.2025.12840. <https://doi.org/10.21070/acopen.10.2025.12840>
- Khoiriyati, A., & Sufirmansyah, S. (2024). The Integration of Digital Technology in Al-Qur'an Hadith Subject: A Study on Instructional Design Creativity at MTsN 2 Kota Kediri. *Edudeena: Journal of Islamic Religious Education*, 8(2), 171–181. <https://doi.org/10.30762/ed.v8i2.3947>
- Mahdi, I., & Hamdani, M. F. (2025). The Influence of Motivation on the Learning Outcomes of Islamic Religious Education for Students at As-Shofa Islamic High School Pekanbaru. *Journal of Comprehensive Science*, 4(1), 105–119.
- Maizari, Sumarni, & Novita, D. (2024). Exploring the Relationship Between Reward Systems and English Learning Motivation: A Mixed-Methods Approach in an Indonesian Islamic High School. *Jelita: Journal of English Language Teaching and Literature*, 5(2), 547–559.
- Muflihah, M., Fitriani, F., Rahayu Kariadinata, Malik, A., & Rahmat, Y. (2024). Comparison of Qur'an Hadith Learning Results from TGT, Peer Tutoring, and STAD Models Based on

- School Background Factors. *Tafkir: Interdisciplinary Journal of Islamic Education*, 5(1), 13–26. <https://doi.org/10.31538/tijie.v5i1.610>
- Mukti, D. M., & Wijanarka, B. S. (2024). Analysis of Factors Influencing the Learning Motivation of Vocational High School Students in Surakarta City. *International Journal of Social Science and Human Research*, 7(08), 6638–6648. <https://doi.org/10.47191/ijsshr/v7-i08-98>
- Muttaqin, M. F., & Fauji, I. (2024). The Effect of Flashcard Media in Improving Memorization of Daily Prayers at SDN 2 Wringinanom. *Tadrib: Jurnal Pendidikan Agama Islam*, 10(1), 630–637.
- Nihaya, M. (2024). Peran dan urgensi motivasi belajar dalam pendidikan agama islam. *Al Urwatul Wutsqa: Kajian Pendidikan Islam*, 4(1), 69–73.
- Ningsih, N. P., & Berek, F. (2023). Upaya Guru dalam Meningkatkan Keaktifan Siswa Didalam Kelas dan Implikasi Bagi Guru Masa Kini. *Jurnal Teologi Injili Dan Pendidikan Agama*, 1(3), 63–71.
- Octavia, S. A. (2020). *Motivasi Belajar dalam Perkembangan Remaja*. Deepublish.
- Permatasari, C. Y., & Sujarwati, I. (2023). The Correlation Between Teachers' Teaching Style and Motivation of Natural Science Students in Learning English at Ten Grade. *Pedagonal: Jurnal Ilmiah Pendidikan*, 7(1), 12–24. <https://doi.org/10.55215/pedagonal.v7i1.6666>
- Puspitasari, E. I., & Affandi, G. R. (2024). Pengaruh Stres Akademik dan Cognitive Load Terhadap Motivasi Belajar Siswa. *Jurnal Psikologi: Jurnal Ilmiah Fakultas Psikologi Universitas Yudharta Pasuruan*, 11(2), 374–388.
- Rahmadania, A., & Aly, H. N. (2023). Implementasi Teori Hirarchy Of Needs Maslow Dalam Meningkatkan Motivasi Belajar Di Yayasan Cahaya Generasi Islam Kota Bengkulu. *Jurnal Pendidikan Dan Konseling (JPDK)*, 5(4), 261–272. <https://doi.org/10.31004/jpdk.v5i4.17456>
- Ramadhan, M. R., Fahmi, M. I. N., Hasanah, S. M., & Rekan, A. A. bin. (2023). *How Flashcard Games Improve Critical Thinking Skills on History of Islamic Culture Material?* 239–246. https://doi.org/10.2991/978-2-38476-038-1_26
- Risanatul, R., & Junaidi, J. (2022). Penyebab Peserta Didik Tidak Berpartisipasi Aktif dalam Pembelajaran Sosiologi di Kelas XI IPS 1 SMAN Merangin Jambi. *Naradidik: Journal of Education & Pedagogy*, 1(3), 327–335.
- Sholeh, M. I., Azah, N., Tasya, D. A., Abror, S., & Mutrofin. (2024). Efektivitas Flashcards sebagai Alat Bantu Hafalan Hadits pada Mata Pelajaran Al-Qur ' an Hadits. *Idarotuna: Jurnal Manajemen Pendidikan Islam*, 1(2), 57–72. <https://doi.org/10.29313/idarotuna.v1i2.4834>
- Sufirmansyah, S. (2025). Enhancing Students Creativity through Design-Based Learning (DBL) in Islamic Religious Education (IRE) Study Program. *EDUKASIA Jurnal Pendidikan Dan Pembelajaran*, 6(1), 15–26. <https://doi.org/10.62775/edukasia.v6i1.1370>
- Sugianto, H. (2023). Game-Based Learning in Enhancing Learning Motivation. *International Journal of Instructional Technollogy*, 02(01), 22–33.
- Sunawir, N. W., Sari, H. W., Rahayu, F., & Hasibuan, K. (2024). The Concept of Learning Motivation in Islamic Religious Education. *Jurnal Pendidikan Tambusai*, 8(2), 28138–28143.
- Wahyudi, D., & Kurniasih, N. (2020). Urgensi Prinsip Kerjasama dan Kompetisi dalam Pengelolaan Pengajaran. *Jurnal Tarbiyah Islamiyah*, 5(2), 35–47.
- Wahyuni, S., & Bhattacharya, S. (2021). Strategy of Islamic Religious Education Teachers in Increasing Student Learning Motivation. *Tafkir: Interdisciplinary Journal of Islamic Education*, 2(2), 229–249. <https://doi.org/10.31538/tijie.v2i2.22>

Wulandari, S. A., & Safitri, S. (2024). Penerapan Metode Game Based Learning Dalam Materi Sejarah Bandung Lautan Api Di Kelas XI IPS SMA Negeri 4 Pagar Alam. *JIPSOS: Jurnal Inovasi Pendidikan Dan Ilmu Sosial*, 2(1), 34–41.