



The Effect of Using Kahoot! on Students' Level of Understanding in Fiqh Classes

^{*1}Dewi Khairunisa, ²Abdul Azis Khoiri, ³Darnanengsih
State Islamic Institute of Sorong, Indonesia
e-mail: dewikhairunisa585@gmail.com

Abstract

The issue explored in this study stems from how Fiqh is often taught in a rather conventional way. In many cases, students simply listen, take notes, and move on, without really being involved in the learning process. Over time, this kind of approach seems to contribute to a lower level of understanding. With that in mind, the study sets out to examine whether using Kahoot! as a learning media can actually make a meaningful difference. A quantitative approach was used, applying a one group pretest-posttest design. The participants were 20 ninth-grade students from MTs Al-Ma'arif 2 Sorong Regency, selected through purposive sampling. Data collection relied on pretest and posttest instruments, supported by observation and documentation. For the analysis, the Shapiro-Wilk normality test was conducted first, followed by the Wilcoxon Signed Ranks Test. The findings show a noticeable increase in the mean score, from 60.50 to 78.50. The significance value of 0.033, which is below 0.05, indicates that the use of Kahoot! has a statistically significant effect on students' understanding. In a way, this suggests that the platform does more than just make learning feel lively; it also helps students grasp Fiqh material in a more effective and meaningful way.

Keywords: learning outcomes; Kahoot; learning media; pretest-posttest; understanding.

Abstrak

Permasalahan dalam penelitian ini dilatarbelakangi dari kondisi pembelajaran Fiqh yang masih cenderung konvensional, di mana peserta didik lebih banyak menerima materi tanpa melibatkan mereka secara aktif, sehingga berdampak pada rendahnya tingkat pemahaman. Oleh karena itu, penelitian ini bertujuan untuk melihat apakah penggunaan Kahoot! sebagai media pembelajaran dapat memberikan perubahan yang nyata. Pendekatan yang digunakan adalah kuantitatif dengan desain one group pretest-posttest, melibatkan 20 peserta didik kelas IX di MTs Al-Ma'arif 2 Kabupaten Sorong yang dipilih melalui purposive sampling. Data dikumpulkan melalui tes pretest dan posttest, serta didukung oleh observasi dan dokumentasi, kemudian dianalisis menggunakan uji normalitas Shapiro-Wilk dan dilanjutkan dengan Wilcoxon Signed Ranks Test. Hasil penelitian menunjukkan adanya peningkatan nilai rata-rata dari 60,50 menjadi 78,50, dengan nilai signifikansi sebesar 0,033 yang lebih kecil dari 0,05, sehingga dapat dikatakan bahwa penggunaan Kahoot! memberikan pengaruh signifikan terhadap pemahaman peserta didik. Dengan demikian, media ini tidak hanya membuat pembelajaran lebih menarik, tetapi juga membantu peserta didik memahami materi Fiqh secara lebih optimal.

Kata kunci: hasil belajar; Kahoot; media pembelajaran; pemahaman; pretest-posttest

©IQRO: Journal of Islamic Education. This is an open access article under the [Creative Commons - Attribution-ShareAlike 4.0 International license \(CC BY-SA 4.0\)](https://creativecommons.org/licenses/by-sa/4.0/)

Introduction

Education is often understood as a process of delivering material, even though its role is far greater than that. Education serves as a strategic means to shape the quality of human resources who are not only academically intelligent but also faithful and of good character. As mandated in Law No. 20 of 2003 on the National Education System, education is a planned and conscious effort to create a learning environment that enables students to develop actively.

In the context of Islamic education in madrasahs, the subject of Fiqh does indeed play a crucial role. It is here that students begin to understand how Sharia law operates – not only in acts of worship such as prayer or fasting, but also in matters of muamalah that are more closely tied to daily life. Thus, Fiqh is not merely a collection of legal concepts to be memorized (Nasution et al., 2025). Fiqh does not merely focus on the cognitive dimension – that is, mastering legal concepts – but also on the formation of religious attitudes and proper religious practices in daily life (M. Ikhsan Nur Effendi, 2023). Therefore, student' level of knowledge regarding fiqh material serves as a key indicator of learning success.

However, looking at conditions on the ground, the situation is not yet fully optimal. Several recent studies still show a similar pattern: religious education tends to be dominated by the lecture method. Teachers actively explain, while students mostly listen and take notes (Akbar et al., 2026). A learning pattern that places too much emphasis on lectures often makes students passive, merely listening and taking notes without truly understanding the content of the material.

This situation is evident among ninth-grade students at MTs Al-Ma'arif 2 in Sorong Regency. Based on the results of initial observations, the majority of students have not yet met the minimum proficiency criteria (KKM), with an average pretest score of 60.50. This indicates that the learning process has not yet been able to actively optimize students' understanding.

When viewed from a constructivist perspective, this situation suggests that the learning process has not fully provided space for students to building their own knowledge (Ariansyah, 2023). Prakash Chand (2023) emphasizes that the process of building knowledge is active, not passive. In this context, learning does not stop at merely receiving information. There is a more active process involved, such as connecting the material to personal experiences, engaging in discussions and, reflecting

on what has been understood. When students merely listen without participating, the knowledge formed tends to be superficial and easily forgotten. Conversely, when they are given the opportunity to explore and connect the material with real-world experiences, the understanding that develops is typically more enduring (Qurrota Akyuna et al., 2025).

In addition, motivation is also a key factor in the learning process. Low student engagement is often linked to a lack of motivation to learn, whether intrinsic or stemming from the learning environment. Motivation theory explains that interest, curiosity, and challenges can encourage students to engage more actively. Without these, learning can easily feel boring and meaningless (Ayuningtiyas & Hajaroh, 2024).

Given these circumstances, learning can no longer rely on monotonous methods. There is a need for innovative media capable of encouraging more active student engagement. One particularly relevant alternative is Kahoot! (Nabila et al., 2025). It is relatively easy to use; students can access it via an app or a browser, making it flexible for use in various classroom settings. Teachers not only deliver content but can also design learning activities using the course and assessment features in the form of interactive quizzes, which students can access directly via their digital devices (Widia et al., 2025).

Kahoot! is not just a simple quiz, but it incorporates elements that, conceptually, are quite influential (Irwan et al., 2019). Scores that appear in real time, time limits for answering, and rankings displayed after each question all create a more dynamic learning atmosphere. Furthermore, the course feature allows for the presentation of material in various formats—such as text, video, or presentation slides—making the learning experience more varied and less monotonous (Putra et al., 2024; Yasyfin Halim Ali, 2025). Previous research indicates that the use of Kahoot! can enhance intrinsic motivation, such as curiosity and a sense of challenge, while also strengthening interactions among students (Erlina et al., 2025). This aligns with motivation theory, which distinguishes between individual dimensions—such as challenge, curiosity, control, and fantasy—and interpersonal dimensions that emerge through cooperation and healthy competition.

The concept of enjoyable learning is also consistent with the values found in the Qur'an, specifically in Surah An-Nahl, verse 125, which emphasizes the need to teach effectively so that students can absorb the message more effectively (Julia Elvina et al., 2024; Khairi et al., 2023). This demonstrates that the learning process must consider an

approach suited to the students' circumstances, so that the material can be received more effectively (Bhardwaj et al., 2025). With a more interactive approach, the classroom atmosphere can feel more lively, and the material presented becomes easier to understand (Halimatussakdiah et al., 2023).

In recent years, a number of findings have demonstrated that Kahoot! is effective in enhancing motivation and learning outcomes, particularly in general subjects such as language and science (Putrawangsa & Hasanah, 2018). In recent years, a number of findings have demonstrated that Kahoot! is effective in enhancing motivation and learning outcomes, particularly in general subjects such as language and science (Putrawangsa & Hasanah, 2018). Second, research has primarily focused on general subjects, while studies specifically examining the implementation of Kahoot! in Fiqh instruction at madrasahs remain limited. Third, previous research has tended to emphasize learning outcomes without deeply examining the learning processes that occur during the use of this medium. These limitations indicate the existence of a significant research gap, particularly in the context of integrating Kahoot! as an interactive learning medium that functions not only as an evaluation tool but also as a means of knowledge construction in Fiqh instruction.

Based on the information at , this study offers novelty in two main aspects. First, this study utilizes the course feature in Kahoot! as a medium for both delivering material and conducting assessments, thereby creating a more structured and interactive learning experience. Second, this study does not merely analyze improvements in learning outcomes quantitatively but also examines the process of student engagement throughout the learning process. Thus, this study is expected to provide empirical contributions to the development of more innovative Fiqh learning strategies.

In addition, this study aims to analyze differences in students' levels of understanding before and after the use of Kahoot! in Fiqh instruction. The hypothesis posited is that there is a significant difference between students' learning outcomes before and after the use of Kahoot!. The results of this study are expected to serve as a foundation for the development of learning models that are more interactive, effective, and relevant to the needs of students in the madrasah setting.

Method

This study employs a quantitative approach using a one-group pretest-posttest pre-experimental design. This design involves a single group that is

assessed before and after receiving the intervention, allowing for a direct analysis of changes in students' level of understanding. However, since this design does not include a control group, the research findings focus on changes within the single treatment group.

The research subjects were ninth-grade students at MTs Al-Ma'arif 2 in Sorong Regency, with a total population of 74 students. The research sample consisted of 20 students from one class, selected using the purposive sampling technique. Purposive sampling is a non-probability sampling technique in which the researcher intentionally selects respondents based on specific criteria relevant to the research objectives (Subhaktiyasa, 2024). The selection of the sample was based on considerations of the students' readiness to use digital-based learning media as well as the suitability of the material being studied, namely qurbani and aqiqah.

This study was conducted over a period of six weeks in stages. During the first week, a pretest was administered to assess the students' initial abilities. Weeks two through four were used for instruction using Kahoot! via its course feature, where the material was presented in the form of text, videos, and presentations combined with interactive quizzes. In the fifth week, a posttest was administered to measure changes in the level of understanding after the intervention, while the sixth week was focused on data processing and analysis.

The research instrument consisted of a multiple-choice test comprising 20 items, each with four answer choices. The instrument was designed based on comprehension indicators, including the ability to translate, interpret, and extrapolate concepts. Additionally, observations and documentation were used as supporting data to describe the learning process. Before use, the instrument's suitability was assessed through validity and reliability tests. Validity testing was conducted using Pearson's Product-Moment Correlation with the aid of SPSS at a significance level of 0.05, with the criterion that an item is valid if the calculated r value is greater than the table r value. Reliability testing used Cronbach's Alpha coefficient, with the criterion that the instrument is reliable if the coefficient value is $\geq 0,60$.

The data analysis was conducted in stages First, a normality test was performed using the Shapiro-Wilk test because the sample size was less than 50. The data were considered normally distributed if the significance value was > 0.05 . Next, hypothesis testing is performed based on the results of the normality test. If the data are normally distributed, a parametric paired-sample t-test is used to compare the mean pretest and posttest scores However, if the data are not normally distributed, the nonparametric Wilcoxon Signed-Rank Test is used as a more appropriate alternative. Hypothesis decisions were based on the significance value (p-value), with a criterion of $p < 0.05$ indicating a significant difference between the pretest and posttest results.

This study has a limitation, namely that it did not use a control group for comparison; therefore, the study's findings are limited to an analysis of changes within a single group. Consequently, future research is advised to employ a stronger experimental design, such as a quasi-experimental design involving a control group, in order to obtain more comprehensive results with a higher level of validity

Results and Discussion

Data Quality Test Results

1. Validity

Validity testing was conducted to determine the extent to which the instrument is truly capable of measuring what it is intended to measure—not merely generating data, but data that is indeed relevant to the research objectives (Fakhri Ramadhan et al., 2024). The instruments used were pretest and posttest questions. To ensure their suitability, each item was tested using *Pearson's Product-Moment* correlation with the aid of SPSS. An item was deemed valid if its significance level was at the 0.05 threshold, , thereby accurately measuring the aspect under study. The following are the results of the validity testing of the pretest questions are presented in the table:

Tabel 1. Validity Results of the Pretest Questions

No	Item	r hitung	r tabel	Note
1	S1	0,750	0,444	Valid
2	S2	0,534	0,444	Valid
3	S3	0,621	0,444	Valid
4	S4	0,624	0,444	Valid
5	S5	0,575	0,444	Valid

6	S6	0,579	0,444	Valid
7	S7	0,720	0,444	Valid
8	S8	0,474	0,444	Valid
9	S9	0,534	0,444	Valid
10	S10	0,667	0,444	Valid
11	S11	0,690	0,444	Valid
12	S12	0,534	0,444	Valid
13	S13	0,641	0,444	Valid
14	S14	0,725	0,444	Valid
15	S15	0,766	0,444	Valid
16	S16	0,585	0,444	Valid
17	S17	0,562	0,444	Valid
18	S18	0,627	0,444	Valid
19	S19	0,599	0,444	Valid
20	S20	0,802	0,444	Valid

Source: IBM SPSS Statistic

The results of the item validity test are presented in the following table

Tabel 2. Posttest Item Validity Results

No	Item	r hitung	r tabel	Note
1	S1	0,922	0,444	Valid
2	S2	0,761	0,444	Valid
3	S3	0,897	0,444	Valid
4	S4	0,919	0,444	Valid
5	S5	0,607	0,444	Valid
6	S6	0,484	0,444	Valid
7	S7	0,919	0,444	Valid
8	S8	0,696	0,444	Valid
9	S9	0,732	0,444	Valid
10	S10	0,505	0,444	Valid
11	S11	0,732	0,444	Valid
12	S12	0,607	0,444	Valid
13	S13	0,640	0,444	Valid
14	S14	0,919	0,444	Valid

15	S15	0,697	0,444	Valid
16	S16	0,544	0,444	Valid
17	S17	0,919	0,444	Valid
18	S18	0,785	0,444	Valid
19	S19	0,897	0,444	Valid
20	S20	0,761	0,444	Valid

Source: IBM SPSS Statistic

Based on Table 1 and Table 2, all items in the pretest and posttest have calculated r values greater than the table r (0.444), so they are deemed valid. The calculated r values range from 0.474 to 0.802 for the pretest and from 0.484 to 0.922 for the posttest. This indicates that all test items are valid and capable of measuring students' comprehension levels in accordance with the established indicators. Thus, the instrument used in this study is suitable for measuring changes in comprehension before and after the intervention.

2. Reliability

Reliability refers to the extent to which measurement results can be trusted (Fakhri Ramadhan et al., 2024). The reliability of the pretest and posttest instruments will be tested using Cronbach's Alpha; according to sugiyono (2023) a reliability value of ≥ 60 is considered reliable. The results of the reliability tests for both the pretest and posttest are presented in the following table:

Tabel 3. Reliability Results of the Pretest Questions

Variabel	Cronbach's Alpha	Number of Items	Descriptio
Pretest Items	0,754	20	Reliable
Posttest Items	0,763	20	Reliabel

Source: IBM SPSS Statistic

In Table 3, the Cronbach's Alpha value for the pretest was 0.754 and for the posttest was 0.763. Both values are above the minimum threshold of 0.60, so the instrument is considered reliable. This means that the instrument has a good level of consistency in measuring students' understanding.

Deskriptive Statistics

Descriptive analysis is used as an initial step to examine the general

overview of the research data before proceeding to more in-depth testing. The following table presents the descriptive statistics:

Tabel 4. Deskriptive Statistics

Variabel	N	Mean	Std. Deviasi
Pretest	20	60,50	21,999
Posttest	20	78,50	27,295

Sumber: IBM SPSS Statistic

Based on Table 4, the average pretest score was 60.50, while the average posttest score increased to 78.50. This increase indicates a change in students' level of understanding following the use of Kahoot!. However, descriptively, this increase is not sufficient to conclude that there is a significant effect; therefore, it must be followed by an inferential test.

Asumption Test

1. Normality Test

This test uses the Shapiro-Wilk test to determine whether the data is normally distributed. The data is considered normal if the sig. value is > 0.05 .

The results of the test are presented in the following table:

Tabel 5. Results of the Data Normality Test

Variabel	N	Sig. Shapiro-wilk	Significance	Decision	Note
Pretest	20	0,056	0,05	Sig > 0.05	Distributed Normal
Posttest	20	0,000	0,05	Sig > 0.05	No Distributed Normal

Sumber: IBM SPSS Statistic

The results of the normality test in table 5 show that te pretest data are normally distributed (Sig. = $0.056 > 0.05$). Meanwhile, the posttest data are not normally distributed (Sig. = $0.000 < 0.05$). Since one of the datasets does not meet the assumption of normality, the hypothesis test used is a non-parametric test, namely

the Wilcoxon Signed Ranks Test. The following are the results of the Wilcoxon Signed Ranks Test:

Tabel 6. Results of the Wilcoxon Signed Ranks Test

Test Aspect	Value	Interpretation
Negative Ranks	5	Respondents experienced a decline in scores
Positive Ranks	13	Respondents experienced an increase in scores
Ties	2	No change
Jumlah Sampel (N)	20	Total respondents
Nilai Z	0,033	Sig < 0.05 (Significant)

Sumber: IBM SPSS Statistic

Based on Table 6, a significance value of $0.033 < 0.05$ was obtained, indicating a significant difference between the pretest and posttest scores. Additionally, 13 students showed improvement, 5 students showed a decline, and 2 students showed no change. The predominance of improvement indicates that the use of Kahoot! has a positive impact on students' level of understanding

The research results show a significant increase in the average score difference between the pretest and posttest. This finding directly addresses the research objective, which is to analyze the difference in students' level of understanding before and after the use of Kahoot! in Fiqh instruction.

Analytically speaking, this improvement did not occur by chance but was influenced by changes in the learning process. The use of Kahoot! fosters a more interactive learning through digital quizzes, immediate feedback, and active student engagement (Özdemir, 2025). This contrasts with conventional learning, which tends to be passive and teacher-centered.

From the perspective of cognitive constructivism, students' increased understanding does not actually occur instantly (Ariansyah, 2023). Learners do not merely receive information but are directly involved in various activities that require them to think (Prakash Chand, 2023). This process enables the adjustment of cognitive structures through the mechanisms of assimilation and accommodation, thereby making understanding more meaningful and lasting longer (Affandi et al., 2023).

The concept of the zone of proximal development (ZPD) explains that

students can achieve a higher level of understanding when they receive support from their learning environment, whether through teachers or interactions with peers (Rahman, 2024). In this study, the use of Kahoot! indirectly creates a supportive learning environment, where students can learn through shared experiences and receive immediate feedback (Widia et al., 2025). This allows students who previously struggled to gradually improve their understanding.

According to motivation theory, the use of Kahoot! appears to impact not only the outcomes but also the learning process itself (Tsarev et al., 2025). Several elements within the game—such as challenge, curiosity, control, and competition—indirectly encourage students to become more engaged during the learning process. When students become active, pay attention, and participate, their chances of understanding the material increase significantly. As engagement increases, so does attention to the material, leading to improved (Wong et al., 2024). In a cause-and-effect relationship, the use of the interactive, gamified Kahoot! increases engagement and motivation, which in turn enhances students' understanding (Tandiono, 2024). These results align with the findings of Aditya Ahmad Fauzi et al. (2025), who emphasize that the level of engagement has a close relationship with the depth of understanding in the learning process.

During the lesson, students appeared more active than before. The use of Kahoot! encouraged them to answer questions, engage more deeply with the material, and interact more actively in class. (Yasyfin Halim Ali, 2025). This study can also be explained using Lev Vygotsky's perspective, which emphasizes the need for support in the learning process (Wardani et al., 2023).

This study not only demonstrates an increase in understanding but also suggests that learning processes involving student engagement have broader implications. This reinforces the view that effective learning is not merely about the delivery of content, but rather how students interact with that content (Hidayah, 2025). When compared with several previous findings, the results of this study show a consistent trend, but with a stronger emphasis on the integration of cognitive and motivational aspects. Thus, this study contributes to a more comprehensive understanding of how learning strategies

can influence learning outcomes.

However, this study not only demonstrates an increase in understanding but also shows that the learning process itself fosters active student engagement. In other words, the improvement is not merely reflected in numerical data but also indicates a shift in how students comprehend the taught material.

Conclusion

Based on the research objectives, these findings conclude that the use of Kahoot! as a learning medium has an impact on improving students' understanding of the Fiqh subject. This is evident from the differences observed in the pretest and posttest results obtained through data analysis. Furthermore, the discussion results also indicate that students' active engagement during the learning process plays a crucial role in enhancing understanding. Thus, it is not merely the medium itself that matters, but also how students engage with it. Consequently, the hypothesis stating that the use of Kahoot! influences students' understanding is supported.

The findings of this study not only demonstrate an increase in understanding but also suggest that the use of interactive digital media can create a more participatory and enjoyable learning environment. In such an environment, students tend to more easily develop a deeper understanding of the material, rather than merely memorizing it. The use of technology, when applied appropriately, not only supports the learning process but can also enhance its overall quality

However, this study still has several limitations. One of them is the use of a pre- experimental design without a control group, meaning that the effectiveness of the intervention cannot yet be fully compared. Furthermore, the relatively small sample size also means that the results of this study should be interpreted with caution, especially if one intends to generalize them to a broader context. Therefore, future research should employ a stronger design, such as an *experimental or quasi-experimental one*. By including a control group and a larger sample size, the results obtained are expected to be not only more valid but also have more convincing generalizability.

References

- Affandi, L., Sappaile, B. I., Warwer, F., Widianingsih, B., Nugroho, W., Yana, M., & Kirom, A. (2023). The Use of Educational Toys as a Learning Medium in Play-Based Learning Activities. *Global Education Journal* 1(3), 141-149. <https://doi.org/10.59525/gej.v1i3.152>
- Akbar, M. D., Aulia, Z., & Khairina, S. Z. (2026). The Influence of Islamic Education Teachers' Teaching Style on the Learning Interest of Grade XII Students at MAS Al-Ishlahiyah Binjai in the 2025/2026 Academic Year. *Fatih: Journal of Contemporary Research*, 02(02), 1044-1063. <https://doi.org/10.61253/j8yhab69>
- Ariansyah, A. D. (2023). the Relevance of Lev Vygotsky'S Constructivist Theory To the Islamic Religious Education Learning System in Indonesia. *MUDIR: Jurnal Manajemen Pendidikan*, 5(1), 217-223. <https://doi.org/10.55352/mudir>
- Ayuningtiyas, V., & Hajaroh, S. (2024). Development of Kahoot! interactive Media to Enchance Learning Motivation in Fiqh Subjects. *Al-Mau'izhoh*, 6(1), 829-838. <https://doi.org/10.31949/am.v6i1.9587>
- Bhardwaj, V., Zhang, S., Tan, Y. Q., & Pandey, V. (2025). Redefining learning: student-centered strategies for academic and personal growth. *Frontiers in Education*, Volume 10-2025. <https://www.frontiersin.org/journals/education/articles/10.3389/feduc.2025.1518602>
- Erlina, G., Vebrianto, R., Tinggi, S., Islam, A., Bengkalis, S., Islam, U., Sultan, N., & Riau, S. K. (2025). PENGEMBANGAN DAN EVALUASI MEDIA KAHOOT SEBAGAI MODUL PEMBELAJARAN PADA MATERI SIFAT-SIFAT TERCELA DI MAN 1 PLUS KETERAMPILAN BENGKALIS. *An-Nahdlah: Jurnal Pendidikan Islam*. <https://doi.org/10.51806/an-nahdlah.v4i3.672>
- Fakhri Ramadhan, M., Siroj, R. A., Win Afgani, M., Raden Fatah Palembang, U., H Zainal Abidin Fikri, J. K., Kemuning, K., Palembang, K., & Selatan, S. (2024). Validity and Reliability. *Journal on Education*, 06(02), 10967-10975.
- Halimatussakdiah, Zaki, A., & Syarifah. (2023). JMI: JURNAL MILLIA ISLAMIA The Effectiveness of Using Game-Based Learning Media (Digital Game-Based Learning) Using the Kahoot Application. *Jmi: Jurnal Millia Islamia*, 2(1), 252-265
- Hidayah, S. (2025). Metode Pembelajaran Aktif : Partisipasi Siswa Lebih Penting dari Sekadar Mendengarkan. *Maliki Interdisciplinary Journal (MIJ)*, 3, 478-482.
- Irwan, I., Luthfi, Z. F., & Waldi, A. (2019). The Effectiveness of Using Kahoot! to Improve Student Learning Outcomes *Pedagogia : Jurnal Pendidikan*, 8(1), 95-104. <https://doi.org/10.21070/pedagogia.v8i1.1866>
- Julia Elvina, Meylani Eka Putri, & Siti Nabila. (2024). Teaching Methods in Surah An-Nahl Verse 125. *IHSANIKA : Jurnal Pendidikan Agama Islam*, 2(3), 207-217. <https://doi.org/10.59841/ihsanika.v2i3.1425>
- Khairi, A., Masri, D., Pratama, R., & Dalimunthe, S. R. (2023). Teaching Methods in Surah An- Nahl Verse 125 Based on the Al-Misbah Exegesis. *Hlbrur Ulama : Journal Ilmu Pendidikan Dan Keislaman*, 5(2), 47-58.
- M. Ikhsan Nur Effendi. (2023). I Integrating Fiqh of Buying and Selling Material into Fiqh Instruction to Foster Economic Awareness Among Senior High School Students. *Jurnal Manajemen Dan Pendidikan Agama Islam*, 1(6), 48-58. . <https://doi.org/10.61132/jmpai.v1i6.1108>

- Nabila, V. P., Atmojo, W. T., Hamidah, W., & Herawaty, W. A. (2025). The Utilization of Kahoot as a Learning Media to Address the Challenges of Islamic Education Learning. *PESHUM: Journal of Education, Social, and Humanities*, 4(4), 5493–5501. <https://doi.org/10.56799/peshum.v4i4.9237>
- Nasution, S., Pohan, A. J., Khairurrijal, Hayati, N., Hsb, Z., & Nst, A. M. (2025). Millennial *Fiqh*: Bridging Islamic Tradition and Social Media in Madrasahs. *Al-Hayat: Journal of Islamic Education*, 9(2), 309–330. <https://doi.org/10.35723/ajie.v9i2.154>
- Ozdemir, O. (2025). Kahoot! Game-based digital learning platform: A comprehensive meta-analysis. *Journal of Computer Assisted Learning*, 41(1), e13084. <https://doi.org/10.1111/jcal.13084>
- Prakash Chand, S. (2023). Constructivism in Education: Exploring the Contributions of Piaget, Vygotsky, and Bruner. *International Journal of Science and Research (IJSR)*, 12(7), 274–278. <https://doi.org/10.21275/sr23630021800>
- Putra, G. S., Maulana, I. I., Chayo, A. D., Haekal, M. I., & Syaharani, R. (2024). Measuring the Effectiveness of E-Learning Platforms in Computer Science Education in the Digital Age. *MENTARI Journal: Management, Education, and Information Technology*, 3(1), 19–29. <https://doi.org/10.33050/mentari.v3i1.559>
- Putrawangsa, S., & Hasanah, U. (2018). INTEGRASI TEKNOLOGI DIGITAL DALAM PEMBELAJARAN DI ERA INDUSTRI 4.0. *Jurnal Tatsqif*, 16(1), 42–54. <https://doi.org/10.20414/jtq.v16i1.203>
- Qurrota Akyuna, R., Dwi Wahyuni, A., & Mintasih, D. (2025). The Role of Interactive Learning Media in. *Journal of Law, Education & Religious Social Studies*, 5(1), 121–132. <https://doi.org/10.47200/awtjhpsa.v5i1.3112>
- Rahman, L. (2024). Vygotsky's Zone of Proximal Development of Teaching and Learning in STEM Education. *International Journal of Engineering Research & Technology (IJERT)*, 13(08). <https://doi.org/10.3389/fpsyg.2024.1306306>
- Subhaktiyasa, P. G. (2024). Determining Population and Sample: Methodological Approaches in Quantitative and Qualitative Research. *Journal of Educational Professions* 9(4), 2721–2731. <https://doi.org/10.29303/jipp.v9i4.2657>
- Tandiono, R. (2024). Gamifying online learning: An evaluation of Kahoot's effectiveness in promoting student engagement. *Education and Information Technologies*, 29(18), 24005–24022. <https://doi.org/10.1007/s10639-024-12800-1>
- Tsarev, R., Roncevic, I., Potekhina, E., Aljarbouh, A., Nikolaeva, I., & Muracova, N. (2025). *Gamification of E-Learning Through Kahoot! to Improve Students' Academic Performance BT - Artificial Intelligence and System Engineering* (R. Silhavy & P. Silhavy (eds.); pp. 397–405). Springer Nature Switzerland.
- Wardani, I. R. W., Putri Zuani, M. I., & Kholis, N. (2023). T. Lev Vygotsky's Theory of Cognitive Development and Its Implications for Learning. *DIMAR: Journal of Islamic Education* 4(2), 332–346. <https://doi.org/10.58577/dimar.v4i2.92>
- Widia, Hibatullah, R., & Raisal, A. Y. (2025). The Effectiveness of Kahoot as an Interactive Evaluation Media in Technology-Based Learning. *Proceeding International Seminar on Islamic Studies*, 6(1), 2638–2643. <https://doi.org/10.3059/insis.v0i0.23744.g13071>
- Wong, Z. Y., Liem, G. A. D., Chan, M., & Datu, J. A. D. (2024). Student engagement and its association with academic achievement and subjective well-being: A

systematic review and meta-analysis. In *Journal of Educational Psychology* (Vol. 116, Issue 1, pp. 48-75). American Psychological Association. .
<https://doi.org/10.1037/edu0000833>

Yasyfin Halim Ali. (2025). Analysis of the Use of Kahoot in Enhancing Student Participation in Arabic Language Learning at MTs Al Washliyah 01 Medan. *IHSANIKA: Journal of Islamic Education*, 3(3), 302-323.
<https://doi.org/10.59841/ihsanika.v3i3.3003>