

copyedit 281.docx

by Pusmedia Publisher

Submission date: 14-Feb-2025 03:47AM (UTC-0800)

Submission ID: 2588417986

File name: copyedit_281.docx (756.01K)

Word count: 5747

Character count: 34874

Development of Word Wall Game Media for Fiqh E-Learning Through a Blended Cooperative Learning Model

Win Hartan^{1✉}, Nyayu Khodijah², Indah Wigati³

³¹
¹Universitas Islam Negeri Sultan Aji Muhammad Idris Samarinda, Indonesia

^{2,3}Universitas Islam Negeri Raden Fatah Palembang, Indonesia

[✉]Corresponding Email: winhartan8@gmail.com

³⁷
Received: 20xx-xx-xx; Accepted: 20xx-xx-xx; Published: 20xx-xx-xx

ABSTRACT

³⁸
This research aims to ³³develop a Word Wall Game learning media based on Blended Cooperative E-Learning for fiqh education. The research method ²⁴employed is Research and Development (R&D). The study involved a diverse group of participants, including ²⁴experts (media experts, learning experts, and fiqh teachers) and grade VIII students, with a total of 210 participants. The sample was selected using a ³⁴simple random sampling technique, involving 8 validators from experts and teachers ³as well as 40 students for a small-scale trial and 30 students for a large-scale trial based on Roscoe's theory. Data were collected ³⁵through questionnaires, interviews, and tests and analyzed using qualitative and quantitative descriptive methods. The results indicate that the Word Wall Game media is valid for use in fiqh learning. Validation scores from media design experts reached 81.66% (valid category), learning experts scored 91.66% (very valid), and fiqh teachers provided a score of 88.33% (valid), with recommendations for improving contextual elements of fiqh content. The media was found to be effective in terms of appearance, materials, and methods. In terms of practicality, it was rated as easy to use by students, with an average practicality score of 4.16. Furthermore, the media significantly enhanced student motivation and engagement in learning, particularly on the topic of halal and haram food and ³⁶beverages. The effectiveness of the media was demonstrated through improved student comprehension, as measured by the N-Gain Score method. The average N-Gain score of 0.65 and 0.67 indicates a medium improvement in student understanding. In conclusion, the Word Wall Game media based on Blended Cooperative E-Learning has been validated as a practical and effective tool for enhancing fiqh learning. This media demonstrates potential for broader application and further refinement to optimize student learning outcomes.

Keywords: Development of Learning Media, Word Wall Game, Fiqh Learning, Blended Cooperative E-Learning.

¹
Copyright © Author

How to Cite :



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License

INTRODUCTION

Technology-based learning has become one of the key strategies in improving the effectiveness of 21st century education.¹ This approach allows the integration of various teaching methods to create a more interactive and participatory learning environment. In the context of Islamic education, especially fiqh learning, this approach is relevant to instill religious values in a way that is adaptive to technological developments.² However, the application of technology-based learning methods, such as blended learning, still faces implementation challenges, especially at the junior high school level (Madrasah Tsanawiyah).³

Fiqh learning as one of the core subjects in the madrasah curriculum aims to form students who not only understand Islamic law theoretically but are also able to apply it in daily life.⁴ Setiawan et al. revealed that one of the main difficulties in learning fiqh is creating a contextual and engaging learning experience.⁵ In addition, a UNESCO survey shows that the use of technology for religious learning is often minimal, especially in areas with limited digital infrastructure.⁶

The application of technology-based learning methods is growing rapidly, especially after the COVID-19 pandemic forced schools to switch to online learning. Blended learning models that combine face-to-face and online learning have emerged as a promising solution in bridging the challenges of post-pandemic education.⁷ The hope is that this approach can increase student engagement, strengthen collaboration, and provide a more varied learning experience.⁸

In the context of fiqh learning, a technology-based cooperative approach is also expected to encourage cooperation between students and encourage deeper mastery of concepts. Educational game media, such as word wall games, have proven to be one of the effective tools to increase student engagement. This approach has the potential to combine elements of interactivity with collaboration, making learning more interesting and meaningful.⁹

Word Wall Game media aims to increase students' access and significant interaction with learning resources, so it is expected to improve the understanding of the material taught by teachers in a fun way. Some of the advantages of word walls are that they can be used for free with a choice of several templates. The types of games offered by this program include crossword puzzles, quizzes, random cards, and many more. An additional advantage is that the games that have been made printable, which will

¹ Dr. Lohans Kumar Kalyani, 'The Role of Technology in Education: Enhancing Learning Outcomes and 21st Century Skills', *International Journal of Scientific Research in Modern Science and Technology*, 3.4 (2024), 05–10.

² Mohammad Ali Muzidi, 'Integrating Technology in Islamic Religious Education: Enhancing Engagement and Learning Outcomes', *EScience Humanity Journal*, 4.2 (2024), 505–13 <<https://doi.org/10.37296/ESCI.V4I2.173>>.

³ Abdullah Syahid Royyan, Supadi Supadi, and Fakhruddin Arbah, 'Blended Learning Management in Madrasah Tsanawiyah During Covid-19 Pandemic', *Jurnal Paedagogy*, 10.1 (2023), 126–33 <<https://doi.org/10.33394/JP.V10I1.6504>>.

⁴ Akma Khairun Nisa and others, 'The Effectiveness of Fiqh Learning on Students' Worship Practices at Madrasah Tsanawiyah', *AL-IMAM: Journal on Islamic Studies, Civilization and Learning Societies*, 5.1 (2024), 53–60 <<https://doi.org/10.58764/IJIM.2024.5.666>>.

⁵ Dedi Setiawan, Khodijah Khodijah, and Ahmad Mansyur, 'Implementing Contextual Teaching and Learning (CTL) Model to Teach Fiqh', *Journal of Research in Islamic Education*, 2.2 (2020), 93–105 <<https://doi.org/10.25217/JRIE.V2I2.1283>>.

⁶ UNESCO, 'Education in a Post-Pandemic World: Nine Ideas for Public Action', UNESCO, 2022.

⁷ Idayati Azkiya and Hermawati Syarif, 'Technology-Based Learning Innovation In the Pandemic Covid-19', *Proceeding of International Conference on Language Pedagogy (ICOLP)*, 1.1 (2021), 74–82 <<https://doi.org/10.24036/ICOLP.V1I1.23>>.

⁸ Fernando Vera, 'Enhancing Student Engagement and Learning Outcomes through Faculty's Active Learning Practices | Transformar', *Revista Transformar Junio*, 4.2 (2023).

⁹ Daniel Ari Widhiatama and Catharina Brameswari, 'The Effectiveness of Wordwall in Enhancing Students' Engagement and Motivation in Literature Classes', *International Journal of Linguistics, Literature and Translation*, 7.4 (2024), 15–24 <<https://doi.org/10.32996/IJLLT.2024.7.4.3>>.

help students who have problems with the internet network.¹⁰

The advantage of this media is its ability to make learning more interactive and fun. This was also conveyed by Evandri, who stated that the use of Word Wall interactive game media can increase students' motivation to learn.¹¹ Word Walls can be used to design and evaluate assessments in learning, as well as to develop critical and active reading and writing skills.¹² The learning process at Madrasah Tsanawiyah Negeri (State MTs) Palembang City has implemented several innovations in learning strategies, one of which is the development of game-based learning media. In addition, the facilities owned have met the standards of its implementation.

The implementation of fiqh learning at State MTs in Palembang City is still dominated by the use of lecture methods and written assignments. This approach is often less effective in attracting the attention of students, especially Generation Z who are more accustomed to interactive media. Early observations show that despite efforts to integrate technology, its use is still limited by the presentation of material in the form of presentations or videos. In addition, collaboration between students is often not optimal due to the lack of learning methods that encourage active interaction.¹³

This condition creates a significant gap between the expectations of modern, technology-integrated fiqh learning and the reality faced by both students and teachers. Students often struggle to grasp complex material due to the lack of innovative and engaging teaching methods. At the same time, teachers encounter challenges stemming from limited training opportunities and insufficient resources to design and implement interactive, technology-based learning media. These obstacles underscore the urgent need for transformative approaches in fiqh education. One promising solution lies in the development of Word Wall Games based on blended cooperative e-learning. By integrating elements of educational games, collaborative group learning, and digital technology, this approach aims to bridge the gap between theoretical learning goals and practical implementation.¹⁴

Previous research has demonstrated the effectiveness of game-based media in enhancing student engagement and learning outcomes. For instance, a study by Ren et al. found that educational games can significantly improve student learning outcomes. However, research related to the development of game media for fiqh learning is still very limited, especially in the context of madrasas (Islamic schools) in Indonesia.¹⁵ Therefore, this study aims to fill this gap by developing and evaluating word wall game media based on blended cooperative e-learning in State MTs in Palembang City.

This study has several new things compared to previous research. *First*, the mixed cooperative e-learning approach used integrates online and offline learning proportionally, so that it is relevant to post-

¹⁰ Desy Saadani and others, 'Improvement of Student Learning Motivation through Word-Wall-Based Digital Game Media', *International Journal of Interactive Mobile Technologies (IJIM)*, 16.06 (2022), 188–205 <<https://doi.org/10.3991/IJIM.V16I06.25729>>.

¹¹ Evandri, 'Development Of Interactive Learning Media Based On Wordwall Games To Increase Motivation And Elementary School Students' Learning Interests', *Journal of Education and Culture (JEaC)*, 4.1 (2024), 84–102 <<https://doi.org/10.47918/IEAC.V4I1.1642>>.

¹² Elhefni Elhefni and others, 'Use of Word Wall Learning Media to Improve Learning Outcomes Indonesian Learning in Elementary Schools', *AL-ISHLAH: Jurnal Pendidikan*, 15.2 (2023), 1556–62 <<https://doi.org/10.35445/ALISHLAH.V15I2.1447>>.

¹³ Harianto Harianto, Mahyudin Ritonga, and Rifki Saputra, 'How Is the Ability of Islamic Religious Education Teachers in Designing and Using ICT Media?', *Proceedings of the 1st International Conference on Education, Humanities, Health and Agriculture, ICEHHA*, 2021 <<https://doi.org/10.4108/EAI.3-6-2021.2310749>>, 90.

¹⁴ Ridwan, 'The Effect of Cooperative Learning in Blended Learning Environment on Students' Learning Achievement: A True-Experimental Study', *Proceedings of the 2nd International Conference on Innovation in Education and Pedagogy (ICIEP 2020)*, 619 (2022) <<https://doi.org/10.2991/ASSEHR.K.211219.029>>.

¹⁵ Jiaopin Ren, Wei Xu, and Ziqing Liu, 'The Impact of Educational Games on Learning Outcomes: Evidence From a Meta-Analysis', *International Journal of Game-Based Learning (IJGBL)*, 14.1 (2024), 1–25 <<https://doi.org/10.4018/IJGBL.336478>>.

pandemic education needs.¹⁶ *Second*, the word wall game media is designed specifically for fiqh materials, taking into account the cultural context and needs of students in MTs.¹⁷ *Third*, this study not only focuses on media development but also evaluates its effectiveness in improving student learning outcomes and their involvement in the learning process.¹⁸ In addition, this research supports the global agenda to utilize technology in education. This is in line with UNESCO's recommendation on the importance of promoting inclusive and technology-based education, especially in developing countries.¹⁹ Thus, the research is not only locally relevant but also has a contribution in an international context.

This research is important because it addresses some of the key challenges in fiqh learning, such as the lack of innovation in teaching methods and the low level of student engagement. In addition, this research provides practical guidance for teachers in developing relevant and effective technology-based learning media. By adopting a blended cooperative e-learning approach, this research also contributes to preparing students to face the challenges of the digital age, without abandoning the religious values that are at the core of Islamic education.⁶⁵

The results of this research are expected to be a model for other madrasas in Indonesia that are facing similar challenges. Thus, this research not only provides benefits for State MTs in Palembang City but also has a wider impact on improving the quality of Islamic education in Indonesia. Seeing the potential of the development of Word Wall Game media in supporting fiqh learning based on Blended Cooperative E-Learning, this research focuses on the development and evaluation of the effectiveness of the media in the State MTs in Palembang City.

RESEARCH METHODOLOGY

This study employs a Research and Development (R&D) model to create Word Wall Games, a learning product designed for Blended Cooperative E-Learning-based fiqh education. The R&D model aligns with the research objective of developing a valid, practical, and effective learning medium that enhances students' understanding of fiqh through a combination of face-to-face and online learning.²⁰ Conducted at MTs Negeri 1 Palembang and MTs Negeri 2 Palembang during the odd semester of the 2023/2024 academic year, the research utilized these strategically located institutions for their supportive infrastructure and accessibility, ensuring the seamless implementation of the Word Wall Games. Activities included face-to-face lessons, online collaboration via e-learning platforms, and iterative development through product testing, observation, and data collection.

The population consisted of media experts, learning experts, fiqh teachers, and 210 eighth-grade students from both schools. Using simple random sampling method,²¹ the study engaged eight validators for product validation, 40 students for small-scale trials, and 30 students for large-scale testing.

¹⁶ Duong Huu Tong, Bui Phuong Uyen, and Lu Kim Ngan, 'The Effectiveness of Blended Learning on Students' Academic Achievement, Self-Study Skills and Learning Attitudes: A Quasi-Experiment Study in Teaching the Conventions for Coordinates in the Plane', *Heliyon*, 8.12 (2022) <<https://doi.org/10.1016/J.HELIYON.2022.E12657>>.

¹⁷ Nurammida Nurammida, Nizarrahmadi Nizarrahmadi, and Alvina Yolanda, 'The Effectiveness Of Wordwall Game As Media To Teach Students English Vocabulary Mastery Of Eighth Grade', *JURNAL JENDELA PENDIDIKAN*, 4.03 (2024), 283–92 <<https://doi.org/10.57008/JJP.V4I03.937>>.

¹⁸ Leli Hasanah Lubis and others, 'The Use of Learning Media and Its Effect on Improving the Quality of Student Learning Outcomes', *International Journal Of Education, Social Studies, And Management (IJESSM)*, 3.2 (2023), 7–14 <<https://doi.org/10.52121/IJESSM.V3I2.148>>.

¹⁹ UNESCO.

²⁰ Teresa Paiva, Maximiano Ribeiro, and Paula Coutinho, 'R&D Collaboration, Competitiveness Development, and Open Innovation in R&D', *Journal of Open Innovation: Technology, Market, and Complexity*, 6.4 (2020), 116 <<https://doi.org/10.3390/JOITMC6040116>>.

²¹ John W. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Thousand Oaks: SAGE Publications, Inc., 2014).

following Roscoe's sampling guidelines.²² Data collection involved questionnaires, observations, and tests. Questionnaires were used to gather expert validation and student feedback on usability, practicality, and motivation.²³ Observations recorded real-time student engagement and comprehension,²⁴ while pre-tests and post-tests measured the effectiveness of the learning media in improving cognitive outcomes.²⁵

Data analysis employed both qualitative and quantitative methods. Qualitative data from expert feedback informed product refinement, while quantitative data from questionnaires and tests assessed validity, practicality, and effectiveness.²⁶ Validity was measured using a Likert scale, with a minimum score of 75% deemed acceptable. Practicality was evaluated through student feedback on usability and content relevance, categorized into levels from "very practical" to "very impractical". Effectiveness was analyzed using N-gain scores to assess improvements between pre-test and post-test results, classified as high, medium, or low.²⁷

RESULTS AND DISCUSSION

A. Validation of Word Wall Game Media in Learning Fiqh Based on Blended Cooperative E-Learning

Word Wall Game Media for fiqh learning based on Blended Cooperative E-Learning is proven to be valid based on the validation results from various parties, namely media experts, learning experts, and fiqh teachers. The validation scores obtained show high results in various aspects:

1. *Media expert*. Giving a score of 81.66% (valid category), judging that this medium is visually and technically feasible, with some minor improvements needed.
2. *Learning experts*. It scored 91.66% (very valid category), indicating that the material and delivery of this media are relevant and clear to students.
3. *Fiqh Teacher*. Giving a score of 88.33% (valid category), with the input of adding elements that are more in line with the context of fiqh learning.

Overall, this media is stated to be very feasible to be used as a learning tool. Feedback from the validation team has been implemented to improve the technical and substance aspects. This media not only meets the validity criteria in terms of design, materials, and learning methods, but is also considered effective in increasing students' understanding of fiqh materials, especially in the environment of MTs Negeri 1 Palembang and MTs Negeri 2 Palembang. These findings confirm that Word Wall Game has the potential to be a learning innovation that is practical, interactive, and supports the achievement of learning goals.

Research shows that Word Wall Game media designed for blended e-learning-based fiqh learning is valid based on validation results from various parties, namely media experts, learning experts, and fiqh teachers. This validation underscores the effectiveness of media in supporting an interactive, relevant and innovative learning process. Media Expert Validation Results Media experts gave a score of 81.66% which is included in the valid category. The visual and technical aspects are the main focus of the assessment, with some minor improvements suggested. This approach is in line with Mayer opinion

²² D. Roscoe, 'Designing for Diversity: Inclusive Sampling', *Ergodesign & HCI*, 9.1 (2021), 67–81.

²³ Hamed Taherdoost, 'Data Collection Methods and Tools for Research: A Step-by-Step Guide to Choose Data Collection Technique for Academic and Business Research Project', *International Journal Of Academic Research in Management (IJARM)*, . 2021.

²⁴ B. B. Kawulich and A. D'Alba, 'Teaching Qualitative Research Methods with Second Life, A3-Dimensional Online Virtual Environment', *Virtual Reality*, 23.4 (2019), 375–84.

²⁵ Dickson Adom, Jephthar Adu Mensah, and Dennis Atsu Dake, 'Test, Measurement, and Evaluation: Understanding and Use of the Concepts in Education', *International Journal of Evaluation and Research in Education*, 9.1 (2020), 109–19 <<https://doi.org/10.11591/IJERE.V9I1.20457>>.

²⁶ Hossein Nassaji, 'Qualitative and Descriptive Research: Data Type versus Data Analysis', *Language Teaching Research*, 19.2 (2015), 129–32 <<https://doi.org/10.1177/1362168815572747>>.

²⁷ S. Eko Putro Widyoko, *Teknik Penyusunan Instrumen Penelitian* (Yogyakarta: Pustaka Pelajar, 2016).

in multimedia learning, which states that effective visual and technical design can increase the attractiveness and efficiency of learning media. Mayer also emphasized that interactive and visually appealing learning media tend to increase student engagement in the learning process.²⁸ In the context of Fiqh learning, the importance of supportive visual design not only helps students understand concepts, but also creates a more enjoyable learning experience. This is relevant to the research findings that technology-based interactive media, such as Word Wall Games, can motivate students to learn more actively).²⁹

The validation results of 91.66% from learning experts show that this media is very valid from the aspect of material delivery. The clarity and relevance of the content are the main points of success. This opinion is supported by scaffolding theory, where media such as Word Wall Games can serve as tools that support students to understand the material gradually. This media provides a learning mechanism that is adaptive to students' needs, especially in a mixed cooperative e-learning environment.³⁰ In another study, it was stated that game-based learning media can improve students' cognitive abilities and conceptual understanding. In the context of fiqh learning, the clarity of the material conveyed through the Word Wall Game can make it easier for students to understand abstract concepts in fiqh.³¹

The fiqh teacher gave a validation score of 88.33%, with input to add elements that are more relevant to the context of fiqh learning. This feedback reflects the need to adapt the content to the realities of classroom learning. This approach is supported by Koehler's of pedagogical content knowledge, which emphasizes the importance of integration between learning methods and taught content to suit the needs of students.³² Teachers as the main users of this media play an important role in implementing the media effectively. Teachers' input also reflects a collaborative approach to learning media development, which is aligned with the concept of participatory design. The Potential and Advantages of Word Wall Games in learning fiqh.

Word Wall Game Media has great potential in supporting fiqh learning, especially in madrasah environments such as MTs Negeri 1 Palembang and MTs Negeri 2 Palembang. By integrating elements of games, technology, and cooperative learning, this medium provides several advantages:

1. *Student interactivity and engagement.* This medium is designed to encourage active participation of students through engaging game mechanics. As mentioned by Oviliani, game-based learning can create a fun and immersive learning atmosphere, so students feel more motivated to learn.³³ Supporting blended learning in a blended learning approach, Word Wall Game allows students to learn independently outside of the classroom while collaborating with their classmates in group discussions. This is relevant to Graham's findings which affirm that blended learning combines the advantages of face-to-face and online learning to create a richer learning experience.³⁴

²⁸ R. E. Mayer, 'Using Multimedia for E-Learning', *Journal of Computer Assisted Learning*, 33.5 (2017), 403–23 <<https://doi.org/10.1111/JCAL.12197>>.

²⁹ Jamilah Jamilah and others, 'Wordwall Games Based Media To Improve Students' Learning Outcomes', *Proceedings of the 4th International Conference on Education and Technology (ICETECH)*, 2024, 485–94 <https://doi.org/10.2991/978-94-6463-554-6_40>.

³⁰ Nurammida, Niza, madi, and Yolanda.

³¹ Amrini Shofiyani and Mar'atush Sholihah, 'Development of Learning Media for Islamic Fiqh Educational Games on Learning Interest', *SCHOLAR: Social and Literature Study in Education*, 1.3 (2021), 142–46.

³² Matthew J. Koehler and others, 'The Technological Pedagogical Content Knowledge Framework', *Handbook of Research on Educational Communications and Technology: Fourth Edition*, 2014, 101–11 <https://doi.org/10.1007/978-1-4614-3185-5_9>.

³³ Titia Mita Oviliani and Ratnawati Susanto, 'The Effect of Wordwall Educational Game-Based Learning Media on Interest in Learning Natural Sciences', *Education and Social Sciences Review*, 4.1 (2023), 27–33 <<https://doi.org/10.29210/07ESSR322200>>.

³⁴ F. Firmansyah, F. Ferianto, and I. Pehliã, 'Challenges to the Implementation of Blended Learning in Islamic Religious Education Learning in Indonesia', *AL-TARBIYAH: Jurnal Pendidikan (The Educational Journal)*, 34.1

2. *Increasing understanding of fiqh materials.* Fiqh learning often involves abstract concepts that require a special approach. With this medium, abstract concepts can be presented visually and interactively, making it easier for students to understand them. Tuti Aliyah's research shows that the visual and structured presentation of material can increase student material absorption. Flexibility and Adaptability Word Wall Game Media is easy to adapt to learning needs, both in terms of content and level of difficulty. This makes it relevant for a variety of learning contexts.³⁵

Based on the results of validation and analysis, Word Wall Game media is proven to be valid and very feasible to be used as a blended cooperative e-learning-based fiqh learning tool. Validation by media experts, learning experts and fiqh teachers shows that this media not only meets technical and pedagogical standards, but is also relevant to the needs of students and teachers. By integrating elements of games, technology, and collaborative approaches, this medium is able to create interactive, effective and fun learning.

This research emphasizes the importance of innovation in learning, especially in today's digital era. With the support of validation results and input from experts, Word Wall Game has the potential to be one of the effective solutions in improving the quality of fiqh learning in madrasas. Further studies are needed to further explore the impact of this media on long-term student learning outcomes.

B. The Practicality of Word Wall Game Media in Fiqh Learning Based on Blended Cooperative E-Learning

The results of the study show that Word Wall Game is considered very practical by students based on the practicality questionnaire given. With an average score of 4.79, this medium has proven to be easy to use and understand, and is able to actively involve students in the learning process. This practicality is supported by its ability to create a fun learning atmosphere, thereby increasing students' motivation to learn. This media is also effective in helping students understand fiqh subject matter, especially about halal and haram food and beverages, with an interactive and interesting approach. Overall, Word Wall Games are not only practical, but they also have a positive impact on the quality of learning and student engagement in the classroom.

Good learning media must meet practical criteria, which are easy to use by users without requiring complicated training. In this study, students considered Word Wall Game to be very practical because:

1. *Ease of access and use.* Word Wall Game is digitally based and can be accessed through devices such as computers, tablets, or smartphones. The simple interface makes it easy for students to understand how this medium works, even for those who are less familiar with technology.³⁶
2. *Attractive interactive design.* The game is equipped with a variety of features such as quizzes, puzzles, and other visually appealing games, thus creating a fun learning atmosphere.³⁷
3. *Content flexibility.* Teachers can adjust the content according to learning needs, both for certain materials and the desired level of difficulty. In terms of this research, the content

(2024), 51–65.

³⁵ Tuti Aliyah and Aan Yuliyanto, 'Application of Wordwall Learning Media to Improve Creative Thinking Ability Of Third Grade Primary School Students in Learning Science', *Conference: The 6th International Conference in Elementary Education*, 2024.

³⁶ Nurammida, Nizarrahmadi, and Yolanda.

³⁷ Surattana Adipat and others, 'Engaging Students in the Learning Process with Game-Based Learning: The Fundamental Concepts', *International Journal of Technology in Education*, 4.3 (2021), 542–52 <<https://doi.org/10.46328/IJTE.169>>.

developed is related to Fiqh materials on halal and haram food and beverages, so that it is relevant to the needs of students.³⁸

An important aspect of the use of learning media is its impact on student motivation and engagement. Word Wall games have been shown to create a fun learning atmosphere, thus increasing students' motivation to learn. Previous research has shown that game-based learning media has the potential to increase student engagement because:

1. *Elements of competition and awards.* These elements can encourage students to actively participate in learning activities, both individually and in group.⁵⁰
2. *Active interaction.* Through the Word Wall Game, students not only become recipients of information, but also actively participate in the learning process through exploration, problem-solving, and reflection.
3. *Positive learning experience.* With a pleasant atmosphere, students tend to feel more motivated to understand the material, so that the learning process becomes more effective.

The high motivation of students contributes directly to the improvement of learning outcomes. This is in line with the constructivist learning theory, which states that the active involvement of students in learning is the key to successful knowledge transfer. The effectiveness of Word Wall Game in learning fiqh material is also recognized in this study, especially for the theme of halal and haram food and beverages. The effectiveness of this media can be seen from several aspects:

1. *Interactive material delivery.* The concept of abstract fiqh can be explained concretely through games, making it easier for students to understand.³⁹
2. *Context-based learning.* Word Wall games allow teachers to present scenarios or situations that are relevant to daily life, such as choosing halal food in a restaurant or understanding product labels.⁴⁰
3. *Improved information retention.* Students tend to remember longer the material delivered through games because they are emotionally and cognitively involved in the learning process.⁴¹

This finding is in line with research conducted by Surajijah et al, which stated that digital-based interactive learning media can improve student learning outcomes, especially in learning based on religious concepts.⁴² Additionally, research by Nadeem emphasizes the importance of interactive and fun elements in digital learning to increase student engagement.⁴³

Overall, Word Wall Game has proven to be a very practical and effective learning medium. Its practicality lies in its ease of use, flexibility in content customization, and attractive interactive design. Its positive impact on student motivation, engagement, and learning outcomes cannot be ignored either.

³⁸ Firman Mansir and Abdul Karim, 'Islamic Education Learning Approaches in Shaping Students' Emotional Intelligence in the Digital Age', *Hayula: Indonesian Journal of Multidisciplinary Islamic Studies*, 4.1 (2020), 67–86 <<https://doi.org/10.21009/004.01.04>>.

³⁹ Zihan Chen, 'The Influence of School's Reward Systems on Students' Development', *Journal of Education, Humanities and Social Sciences*, 8 (2023), 1822–27 <<https://doi.org/10.54097/EHSS.V8I1.4591>>.

⁴⁰ Vanessa Marensi, Suarman Suarman, and Almasdi Syahza, 'The Effectiveness Of Using Word Wall-Based Learning Media In Increasing Students' Learning Activities On Economy Learning Subjects At Sma Pgrl Pekanbaru', *JURNAL PAJAR (Pendidikan Dan Pengajaran)*, 7.2 (2023), 407 <<https://doi.org/10.33578/PJR.V7I2.9165>>.

⁴¹ Nelson Cowan, 'Working Memory Underpins Cognitive Development, Learning, and Education', *Educational Psychology Review*, 26.2 (2013), 197 <<https://doi.org/10.1007/S10648-013-9246-Y>>.

⁴² Surajijah and others, 'The Effectiveness of Using Media Technology in Islamic Religious Education in an Independent Curriculum: Technocultural Study of Religious Education', *Jurnal Iqra': Kajian Ilmu Pendidikan*, 8.1 (2023), 335–49 <<https://doi.org/10.25217/JI.V8I1.2760>>.

⁴³ Muhammad Nadeem, Melinda Oroszlyanova, and Wael Farag, 'Effect of Digital Game-Based Learning on Student Engagement and Motivation', *Computers*, 12.9 (2023) <<https://doi.org/10.3390/COMPUTERS12090177>>.

Especially in learning Fiqh about halal and haram food and beverages, this media helps students understand the concept more deeply through a relevant and interactive approach.

The application of learning media such as Word Wall Game in schools is highly encouraged, especially for materials that require an innovative approach to make them more attractive to students. However, for more optimal results, it is necessary to conduct training for teachers to make the best use of this media. In addition, further research is also needed to examine its effectiveness in various other learning contexts.

C. The Effectiveness of Word Wall Game Media in Improving Students' Fiqh Learning Outcomes Through Blended Cooperative E-Learning Based Learning

The effectiveness test of the Wordwall Game was carried out through a comparative analysis of pre-test and post-test scores using the N-Gain Score method, which showed positive results on improving student understanding. The average N-Gain Score is in the medium category, namely 0.65 in MTs Negeri 1 Palembang and 0.67 in MTs Negeri 2 Palembang. Although in the moderate category, these results show that this learning media is effective in helping students understand the concepts of halal and haram better. The potential for further development continues to increase the effectiveness of this media, so that learning outcomes can be optimized in the future. Overall, Word Wall Game is a proven learning tool that can support the learning process with an engaging and interactive approach.

Research on the effectiveness of Word Wall Games as a learning medium reveals that it has the potential to improve student understanding. Using the N-Gain Score analysis method, this study evaluated the increase in scores from pre-test to post-test results in two different locations, namely MTs Negeri 1 Palembang and MTs Negeri 2 Palembang. The results showed that the average N-Gain Score was 0.65 (medium category) in MTs Negeri 1 Palembang and 0.67 (medium category) in MTs Negeri 2 Palembang. Even in the medium category, the results still provide a positive picture of the effectiveness of Word Wall Game. The increase in N-Gain Score of 0.65 and 0.67 indicates that there is significant progress in student understanding, although it has not reached the high category. Based on the N-Gain scale, these results reflect that students experience a fairly good increase in understanding, especially when compared to traditional learning. This improvement can be attributed to Wordwall Game's ability to present material in a relevant and fun way.

The use of Word Wall Game as a technology-based learning medium provides a more interesting and interactive learning experience than conventional methods. This is in line with research that shows that technology-based learning can increase students' learning motivation because it involves visual elements and active participation.⁴⁴ In the context of this research, the focus of the material on the concepts of halal and haram which are usually theoretical in nature has been successfully packaged to be more interesting through educational games.

The effectiveness of learning media such as Word Wall Game lies not only in academic outcomes, but also in other aspects, such as student motivation and involvement in learning. According to research by Adipat et al and Wahyuni et al, educational games have the potential to create a conducive learning environment, where students feel more motivated to learn because of the interactive and competitive approach.⁴⁵ In addition, this media allows students to learn collaboratively, thereby improving communication and cooperation between students. However, this effectiveness also depends on the design of the game and its relevance to the curriculum. This research shows that while Word Wall

⁴⁴ Prima Belvin Gulo and others, 'View of The Effect of Interactive Multimedia Wordwall on Students' Vocabulary Learning Outcomes at SMA Negeri 1 Huruna', *SELTIC*, 7.2 (2024).

⁴⁵ Adipat and others; Erna Wahyuni and others, 'The Role of Educational Games in Increasing Student Motivation and Engagement', *Al-Hijr: Journal of Adulearn World*, 2.4 (2023), 366-83 <<https://doi.org/10.55849/ALHIJR.V2I4.552>>.

Games are effective in improving comprehension, there is room for further development. The use of additional features, such as Higher Level Thinking Skills (HOTS)-based questions, can help to further improve learning outcomes.

The results also show that there is potential to increase the effectiveness of this medium. The main challenges in implementing Word Wall Games include the limitations of technology in some schools and the difficulty in adapting the game design to specific learning needs. For example, if schools do not have adequate technological infrastructure, the implementation of digital-based media like this is less than optimal.⁴⁶ In addition, game designs that are too simple or do not match the student's ability level can reduce their effectiveness.

Potential developments could include improved personalization features in the game, **5** that they are better suited to the needs of students at different skill levels. Additionally, integrating live feedback in games can also help students understand their mistakes and improve their understanding in real-time. This research has important implications for teachers and learning media developers. Teachers can take advantage of Word Wall Games to create a more enjoyable learning atmosphere, especially on materials that require a deep understanding of concepts such as halal and haram. For developers, the results of this **11** research can be the basis for creating more effective educational games by prioritizing design elements that suit the needs of students.

Other recommendations include the integration of technology-based evaluations that can help teachers track student progress in more detail. In addition, training for teachers utilizing this media optimally is also important to ensure effective implementation. The results showed that Word Wall Game was an effective learning medium in improving student understanding, even with moderate N-Gain Score results. This media has succeeded in creating a more interesting and interactive learning experience, especially in learning the concepts of halal and haram. The potential for the development of this media remains, especially in terms of game design that is more in line with the needs of modern learning. With adequate technology support and training, Word Wall Game can be one of the more optimal learning tools in the future.

CONCLUSION

Word Wall Game Media has been shown to be a viable learning medium to improve fiqh learning in the Blended Cooperative E-Learning. The design aligns with the needs of modern educational approaches by combining engaging interactive elements with a strong instructional foundation. These media can be adapted to a variety of learning environments, offering visual and technical features that are user-friendly and conducive to fostering student understanding. In addition, it effectively promotes active participation and motivation, creating a more enjoyable learning experience. The integration of contextual elements in the material ensures relevance and supports the learning of key fiqh concepts, such as halal and haram principles. These findings suggest that Word Wall Game Media has significant potential for wider implementation in similar educational settings, with opportunities for continuous improvement to further enhance their effectiveness.

REFERENCE

- Adipat, Surattana, Kittisak Laksana, Kanrawee Busayanon, Alongkom Ausawasowan, and Boonlit Adipat, 'Engaging Students in the Learning Process with Game-Based Learning: The Fundamental Concepts', *International Journal of Technology in Education*, 4.3 (2021), 542-52 <<https://doi.org/10.46328/IJTE.169>>
- Adom, Dickson, Jephthar Adu Mensah, and Dennis Atsu Dake, 'Test, Measurement, and Evaluation: Understanding and Use of the Concepts in Education', *International Journal of Evaluation and*

⁴⁶ Abid Haleem and others, 'Understanding the Role of Digital Technologies in Education: A Review', *Sustainable Operations and Computers*, 3 (2022), 275-85 <<https://doi.org/10.1016/J.SUSOC.2022.05.004>>.

- Research in Education*, 9.1 (2020), 109–19 <<https://doi.org/10.11591/IJERE.V9I1.20457>>
- Azkiya, Hidayati, and Hermawati Syarif, 'Technology-Based Learning Innovation In the Pandemic Covid-19', *Proceeding of International Conference on Language Pedagogy (ICOLP)*, 1.1 (2021), 74–82 <<https://doi.org/10.24036/ICOLP.V1I1.23>>
- Chen, Zihan, 'The Influence of School's Reward Systems on Students' Development', *Journal of Education, Humanities and Social Sciences*, 8 (2023), 1822–27 <<https://doi.org/10.54097/EHSS.V8I1.4591>>
- Cowan, Nelson, 'Working Memory Underpins Cognitive Development, Learning, and Education', *Educational Psychology Review*, 26.2 (2013), 197 <<https://doi.org/10.1007/S10648-013-9246-Y>>
- Creswell, John W., *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Thousand Oaks: SAGE Publications, Inc., 2014)
- Elhefni, Elhefni, Al Ihwanah Al Ihwanah, Helen Sabera Adib, Rita Ariani, and Ria Safitri, 'Use of Word Wall Learning Media to Improve Learning Outcomes Indonesian Learning in Elementary Schools', *AL-ISHLAH: Jurnal Pendidikan*, 15.2 (2023), 1556–62 <<https://doi.org/10.35445/ALISHLAH.V15I2.1447>>
- Evandri, 'Development Of Interactive Learning Media Based On Wordwall Games To Increase Motivation And Elementary School Students' Learning Interests', *Journal of Education and Culture (JEaC)*, 4.1 (2024), 84–102 <<https://doi.org/10.47918/JEAC.V4I1.1642>>
- Fernando Vera, 'Enhancing Student Engagement and Learning Outcomes through Faculty's Active Learning Practices | Transformar', *Revista Transformar Junio*, 4.2 (2023)
- Firmansyah, F., F. Ferianto, and I. PehlîÄ, 'Challenges to the Implementation of Blended Learning in Islamic Religious Education Learning in Indonesia', *AL-TARBIYAH: Jurnal Pendidikan (The Educational Journal)*, 34.1 (2024), 51–65
- Haleem, Abid, Mohd Javaid, Mohd Asim Qadri, and Rajiv Suman, 'Understanding the Role of Digital Technologies in Education: A Review', *Sustainable Operations and Computers*, 3 (2022), 275–85 <<https://doi.org/10.1016/J.SUSOC.2022.05.004>>
- Hamed Taherdoost, 'Data Collection Methods and Tools for Research: A Step-by-Step Guide to ChooseData Collection Technique for Academic and Business Research Project', *International Journal OfAcademic Research in Management (IJARM)*, , 2021
- Harianto, Harianto, Mahyudin Ritonga, and Riki Saputra, 'How Is the Ability of Islamic Religious Education Teachers in Designing and Using ICT Media?', *Proceedings of the 1st International Conference on Education, Humanities, Health and Agriculture, ICEHHA*, , 2021 <<https://doi.org/10.4108/EAI.3-6-2021.2310749>>
- Hasanah Lubis, Leli, Budi Febriani, Rendi Fitra Yana, Azhar Azhar, and Mulkan Darajat, 'The Use of Learning Media and Its Effect on Improving the Quality of Student Learning Outcomes', *International Journal Of Education, Social Studies, And Management (IJESSM)*, 3.2 (2023), 7–14 <<https://doi.org/10.52121/IJESSM.V3I2.148>>
- Jamilah, Jamilah, Devia Ramadani, Arik Darajat, Ade Suherman, and Nadhifa Karimah, 'Wordwall Games Based Media To Improve Students' Learning Outcomes', *Proceedings of the 4th International Conference on Education and Technology (ICETECH)*, 2024, 485–94 <https://doi.org/10.2991/978-94-6463-554-6_40>
- Kalyani, Dr. Lohans Kumar, 'The Role of Technology in Education: Enhancing Learning Outcomes and 21st Century Skills', *International Journal of Scientific Research in Modern Science and Technology*, 3.4 (2024), 05–10
- Kawulich, B. B., and A. D'Alba, 'Teaching Qualitative Research Methods with Second Life, A3-Dimensional Online Virtual Environment', *Virtual Reality*, 23.4 (2019), 375–84
- Koehler, Matthew J., Punya Mishra, Kristen Kereluik, Tae Seob Shin, and Charles R. Graham, 'The Technological Pedagogical Content Knowledge Framework', *Handbook of Research on Educational Communications and Technology: Fourth Edition*, 2014, 101–11 <https://doi.org/10.1007/978-1-4614-3185-5_9>
- Mahmudi, Mohammad Ali, 'Integrating Technology in Islamic Religious Education: Echaning Engagement and Learning Outcomes', *EScience Humanity Journal*, 4.2 (2024), 505–13 <<https://doi.org/10.37296/ESCI.V4I2.173>>
- Mansir, Firman, and Abdul Karim, 'Islamic Education Learning Approaches in Shaping Students'

- Emotional Intelligence in the Digital Age', *Hayula: Indonesian Journal of Multidisciplinary Islamic Studies*, 4.1 (2020), 67–86 <<https://doi.org/10.21009/004.01.04>>
- Marensi, Vanessa, Suarman Suarman, and Almasdi Syahza, 'The Effectiveness Of Using Word Wall-Based Learning Media In Increasing Students' Learning Activities On Economy Learning Subjects At Sma PGRI Pekanbaru', *JURNAL PAJAR (Pendidikan Dan Pengajaran)*, 7.2 (2023), 407 <<https://doi.org/10.33578/PJR.V7I2.9165>>
- Mayer, R. E., 'Using Multimedia for E-Learning', *Journal of Computer Assisted Learning*, 33.5 (2017), 403–23 <<https://doi.org/10.1111/JCAL.12197>>
- Nadeem, Muhammad, Melinda Oroszlyanova, and Wael Farag, 'Effect of Digital Game-Based Learning on Student Engagement and Motivation', *Computers*, 12.9 (2023) <<https://doi.org/10.3390/COMPUTERS12090177>>
- Nassaji, Hossein, 'Qualitative and Descriptive Research: Data Type versus Data Analysis', *Language Teaching Research*, 19.2 (2015), 129–32 <<https://doi.org/10.1177/1362168815572747>>
- Nisa, Akma Khairun, Siska Lailan Munira RKT, Ahmad Sabri, and Rully Hidayatullah, 'The Effectiveness of Fiqh Learning on Students' Worship Practices at Madrasah Tsanawiyah', *AL-IMAM: Journal on Islamic Studies, Civilization and Learning Societies*, 5.1 (2024), 53–60 <<https://doi.org/10.58764/J.IM.2024.5.66>>
- Nurammida, Nurammida, Nizarrahmadi Nizarrahmadi, and Alvina Yolanda, 'The Effectiveness Of Wordwall Game As Media To Teach Students English Vocabulary Mastery Of Eighth Grade', *JURNAL JENDELA PENDIDIKAN*, 4.03 (2024), 283–92 <<https://doi.org/10.57008/JJP.V4I03.937>>
- Oviliyani, Titia Mita, and Ratnawati Susanto, 'The Effect of Wordwall Educational Game-Based Learning Media on Interest in Learning Natural Sciences', *Education and Social Sciences Review*, 4.1 (2023), 27–33 <<https://doi.org/10.29210/07ESSR322200>>
- Paiva, Teresa, Maximiano Ribeiro, and Paula Coutinho, 'R&D Collaboration, Competitiveness Development, and Open Innovation in R&D', *Journal of Open Innovation: Technology, Market, and Complexity*, 6.4 (2020), 116 <<https://doi.org/10.3390/JOITMC6040116>>
- Prima Belvin Gulo, Afore Tahir Harefa, Yasminar Amaerita Telaumbanua, LastName, and Riswan Zega, 'View of The Effect of Interactive Multimedia Wordwall on Students' Vocabulary Learning Outcomes at SMA Negeri 1 Huruna', *SELTIC*, 7.2 (2024)
- Ren, Jiaopin, Wei Xu, and Ziqing Liu, 'The Impact of Educational Games on Learning Outcomes: Evidence From a Meta-Analysis', *International Journal of Game-Based Learning (IJGBL)*, 14.1 (2024), 1–25 <<https://doi.org/10.4018/IJGBL.336478>>
- Ridwan, 'The Effect of Cooperative Learning in Blended Learning Environment on Students' Learning Achievement: A True-Experimental Study', *Proceedings of the 2nd International Conference on Innovation in Education and Pedagogy (ICIEP 2020)*, 619 (2022) <<https://doi.org/10.2991/ASSEHR.K.211219.029>>
- Roscoe, R. D., 'Designing for Diversity: Inclusive Sampling', *Ergodesign & HCI*, 9.1 (2021), 67–81
- Royyan, Abdullah Syahid, Supadi Supadi, and Fakhruddin Arbah, 'Blended Learning Management in Madrasah Tsanawiyah During Covid-19 Pandemic', *Jurnal Paedagogy*, 10.1 (2023), 126–33 <<https://doi.org/10.33394/JP.V10I1.6504>>
- Safitri, Desy, Suci Awalia, Tunjungsari Sekaringtyas, Sri Nuraini, Ika Lestari, Yustia Suntari, and others, 'Improvement of Student Learning Motivation through Word-Wall-Based Digital Game Media', *International Journal of Interactive Mobile Technologies (IJIM)*, 16.06 (2022), 188–205 <<https://doi.org/10.3991/IJIM.V16I06.25729>>
- Setiawan, Dedi, Khodijah Khodijah, and Ahmad Mansyur, 'Implementing Contextual Teaching and Learning (CTL) Model to Teach Fiqh', *Journal of Research in Islamic Education*, 2.2 (2020), 93–105 <<https://doi.org/10.25217/JRIE.V2I2.1283>>
- Shofiyani, Amrini, and Mar'atush Sholihah, 'Development of Learning Media for Islamic Fiqh Educational Games on Learning Interest', *SCHOOLAR: Social and Literature Study in Education*, 1.3 (2021), 142–46
- Surajijah, Rusdiana, Rusdiah, M. Ramli, and Murdan, 'The Effectiveness of Using Media Technology in Islamic Religious Education in an Independent Curriculum: Technocultural Study of Religious Education', *Jurnal Iqra': Kajian Ilmu Pendidikan*, 8.1 (2023), 335–49

- <https://doi.org/10.25217/JI.V8I1.2760>
- Tong, Duong Huu, Bui Phuong Uyen, and Lu Kim Ngan, 'The Effectiveness of Blended Learning on Students' Academic Achievement, Self-Study Skills and Learning Attitudes: A Quasi-Experiment Study in Teaching the Conventions for Coordinates in the Plane', *Helicon*, 8.12 (2022) <https://doi.org/10.1016/J.HELIYON.2022.E12657>
- Tuti Aliyah, and Aan Yuliyanto, 'Application of Wordwall Learning Media to Improve The Creative Thinking Ability Of Third Grade Primary School Students in Learning Science', *Conference: The 6th International Conference in Elementary Education*, 2024
- UNESCO, 'Education in a Post-Pandemic World: Nine Ideas for Public Action', *UNESCO*, 2022
- Wahyuni, Erna, Nur Antoni Eko Tanuso, Yaredi Waruwu, Yessy Mata, and Adi Nugroho Susanto Putro, 'The Role of Educational Games in Increasing Student Motivation and Engagement', *Al-Hijr: Journal of Adullearn World*, 2.4 (2023), 366–83 <https://doi.org/10.55849/ALHIJR.V2I4.552>
- Widhiatama, Daniel Ari, and Catharina Brameswari, 'The Effectiveness of Wordwall in Enhancing Students' Engagement and Motivation in Literature Classes', *International Journal of Linguistics, Literature and Translation*, 7.4 (2024), 15–24 <https://doi.org/10.32996/IJLLT.2024.7.4.3>
- Widyoko, S. Eko Putro, *Teknik Penyusunan Instrumen Penelitian* (Yogyakarta: Pustaka Pelajar, 2016)

ORIGINALITY REPORT

24%

SIMILARITY INDEX

21%

INTERNET SOURCES

17%

PUBLICATIONS

10%

STUDENT PAPERS

PRIMARY SOURCES

1	iaibbc.e-journal.id Internet Source	1%
2	Submitted to Curtin University of Technology Student Paper	1%
3	Wulan Patria Saroinsong, Muhamad Nurul Ashar, Irena Y. Maureen, Lina Purwaning Hartanti et al. "Reimagining Innovation in Education and Social Sciences", Routledge, 2023 Publication	1%
4	pub.darulfunun.id Internet Source	1%
5	ebin.pub Internet Source	1%
6	www.jurnal.umsb.ac.id Internet Source	1%
7	id.wikipedia.org Internet Source	1%
8	www.iieta.org Internet Source	1%
9	doaj.org Internet Source	<1%
10	repository.paramadina.ac.id Internet Source	<1%
11	Rizka amalia Az Zahrah, Khoirul Anwar. "The Effect Using Wordwall Game Applications To	<1%

Improve Student's Vocabulary In Chumchon
Ban Phanokkhao School", DIDAKTIKA : Jurnal
Pemikiran Pendidikan, 2023

Publication

12 aassjournal.com <1 %
Internet Source

13 jurnal.stain-madina.ac.id <1 %
Internet Source

14 al-kindipublisher.com <1 %
Internet Source

15 ejournal.undiksha.ac.id <1 %
Internet Source

16 journal.unm.ac.id <1 %
Internet Source

17 Submitted to Nashville State Community
College <1 %
Student Paper

18 vm36.upi.edu <1 %
Internet Source

19 www.atlantis-press.com <1 %
Internet Source

20 www.cienciavitae.pt <1 %
Internet Source

21 Sri Widayati, Tataq Siswono, Wiryanto
Wiryanto, Suryanti Suryanti, Budi Jatmiko.
"PERSEPSI CALON GURU ANAK USIA DINI
MENGENAI KONSEP BILANGAN 1-10", Jurnal
Anak Usia Dini Holistik Integratif (AUDHI),
2023 <1 %
Publication

22 www.apgads.lu.lv <1 %
Internet Source

23	Andreas Paska Suryo Saputro, Adi Winanto. "The use of Word Wall Learning Media in Science Learning to Improve The Learning Outcomes of Class 5c Students of Elementary School Kutowinangun 01 Salatiga", Tunas: Jurnal Pendidikan Guru Sekolah Dasar, 2024 Publication	<1 %
24	ejournal.jendelaedukasi.id Internet Source	<1 %
25	ojs.fkipummy.ac.id Internet Source	<1 %
26	Stephanie Milani, Nicholay Topin, Manuela Veloso, Fei Fang. "Explainable Reinforcement Learning: A Survey and Comparative Review", ACM Computing Surveys, 2024 Publication	<1 %
27	worldwidescience.org Internet Source	<1 %
28	Duygu Mutlu-Bayraktar, Veysel Cosgun, Tugba Altan. "Cognitive load in multimedia learning environments: A systematic review", Computers & Education, 2019 Publication	<1 %
29	Submitted to University of York Student Paper	<1 %
30	altius.ejournal.unsri.ac.id Internet Source	<1 %
31	ejournal.unuja.ac.id Internet Source	<1 %
32	journals.ubmg.ac.id Internet Source	<1 %
33	www.journal.staihubbulwathan.id Internet Source	<1 %

34	riset.unisma.ac.id Internet Source	<1 %
35	vtechworks.lib.vt.edu Internet Source	<1 %
36	Submitted to Liberty University Student Paper	<1 %
37	Submitted to Sriwijaya University Student Paper	<1 %
38	edunesia.org Internet Source	<1 %
39	ejournal.staialhikmahpariangan.ac.id Internet Source	<1 %
40	eprints.walisongo.ac.id Internet Source	<1 %
41	journal.ia-education.com Internet Source	<1 %
42	publikasiilmiah.unwahas.ac.id Internet Source	<1 %
43	Dedesko, Sandra. "The Link Between Buildings and Cognitive Performance.", Harvard University, 2024 Publication	<1 %
44	Padma Rani, Bhanu Bhakta Acharya, Kulveen Trehan. "Digital Inequalities in Media Education in South Asia - Context and Consequences of the Covid-19 Pandemic", Routledge, 2025 Publication	<1 %
45	Submitted to Sunway Education Group Student Paper	<1 %
46	journal.iaimnumetrolampung.ac.id Internet Source	<1 %

47	repository.unpar.ac.id Internet Source	<1 %
48	ajp.ugj.ac.id Internet Source	<1 %
49	proceedings.upi.edu Internet Source	<1 %
50	Parfait M. Eloundou-Enyegue. "Addressing Global Challenges – Exploring Socio-Cultural Dynamics and Sustainable Solutions in a Changing World", Routledge, 2024 Publication	<1 %
51	Erwin Baruna Sandi Yudha, Jekti Prihatin, Pramudya Dwi Aristya Putra. "EFEKTIVITAS E-MODUL PEMBELAJARAN BERBASIS STEM (SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATIC) MATERI USAHA DAN ENERGI UNTUK MENINGKATKAN KETERAMPILAN BERPIKIR KRITIS PADA SISWA SMA", Jurnal Pendidikan Edutama, 2024 Publication	<1 %
52	Submitted to Victoria University Student Paper	<1 %
53	e-jurnal.staiattanwir.ac.id Internet Source	<1 %
54	ejournal.unwaha.ac.id Internet Source	<1 %
55	journal.unilak.ac.id Internet Source	<1 %
56	Nadia Rehman, Xiao Huang, Amir Mahmood, Mohammed A.M. AlGerafi, Saima Javed. "Project-based learning as a catalyst for 21st-Century skills and student engagement in the math classroom", Heliyon, 2024	<1 %

57 Uus Toharudin. "Sundanese Traditional Game 'Bebentengan' (Castle): Development of Learning Method Based On Sundanese Local Wisdom", *European Journal of Educational Research*, 2021

Publication

<1 %

58 archive.conscientiabeam.com

Internet Source

<1 %

59 repository.stkippacitan.ac.id

Internet Source

<1 %

60 Esteban Crespo-Martínez, Salvador Bueno, M. Dolores Gallego. "Uses and Gratifications approach to evaluate the continuance intention of ATIC: A serious video game to learn entrepreneurship", *The International Journal of Management Education*, 2025

Publication

<1 %

61 Submitted to Robert Kennedy College

Student Paper

<1 %

62 Sarah Ritvo, Wayne Ho. "An investigation of systematic discrimination in participant recruitment practices", *International Journal of Industrial Ergonomics*, 2024

Publication

<1 %

63 digilib.uin-suka.ac.id

Internet Source

<1 %

64 prosiding.appipgri.id

Internet Source

<1 %

65 prosiding.stainim.ac.id

Internet Source

<1 %

66 Svetlana V. Nuss, Vita V. Kogan, Svetlana V. Nuss. "Dynamic Teaching of Russian - Games

<1 %

and Gamification of Learning", Routledge,
2023

Publication

67 Türköz, Necdet. "Undergraduate Students' Perceptions About Animation Based Materials Used in Basic Electronic and Electronic Components Course.", Middle East Technical University (Turkey), 2024

Publication

<1 %

68 discovery.researcher.life

Internet Source

<1 %

69 eudl.eu

Internet Source

<1 %

70 journal.iaisambas.ac.id

Internet Source

<1 %

71 journals.bilpubgroup.com

Internet Source

<1 %

72 jurnal.stkipmb.ac.id

Internet Source

<1 %

73 jurnal.univpgri-palembang.ac.id

Internet Source

<1 %

74 vital.seals.ac.za:8080

Internet Source

<1 %

75 Ari Muhammad Syifa, Lilla Musyahda, David Segoh. "Systematic literature review: DOGBL in enhancing EFL students' motivation", Journal of Education and Learning (EduLearn), 2024

Publication

<1 %

76 Brown, Danielle R.. "Exploring Teachers' Perceptions of the Impact of Digital Game-Based Learning on Student Engagement, Motivation, and Learning Outcomes in K-12

<1 %

Social Studies", Florida Atlantic University,
2024

Publication

77 Chairul Bariyah. "Application of Word Wall to Foster Students' Understanding of Science Learning", Sustainable Jurnal Kajian Mutu Pendidikan, 2024 <1 %
Publication

78 Yonty Friesem, Usha Raman, Igor Kanižaj, Grace Y. Choi. "The Routledge Handbook of Media Education Futures Post-Pandemic", Routledge, 2022 <1 %
Publication

79 digilib.uinsa.ac.id <1 %
Internet Source

80 ijble.com <1 %
Internet Source

81 sdgsreview.org <1 %
Internet Source

82 www.ejournal.radenintan.ac.id <1 %
Internet Source

83 www.ejournal.uit-lirboyo.ac.id <1 %
Internet Source

84 www.rsu.edu.ng <1 %
Internet Source

85 Ahmad Mujib, Marhamah Marhamah. "Al-Qur`an Learning Innovation Based on Blended Cooperative e-Learning in School", Journal of Educational and Social Research, 2020 <1 %
Publication

86 Asikin Nor, Muhammad Yusuf, Ibnu Arabi. "Strategies for Improving the Professionalism <1 %

of Islamic Education Teachers at University",
Tafkir: Interdisciplinary Journal of Islamic
Education, 2024

Publication

87

library.carolinau.edu

Internet Source

<1 %

88

Sarah, Mafampe Mokware. "The
Implementation of Information
Communication Technology for Teaching and
Learning in Tshwane West District.",
University of Pretoria (South Africa), 2024

Publication

<1 %

89

ejournal.uin-suka.ac.id

Internet Source

<1 %

90

www.researchgate.net

Internet Source

<1 %

Exclude quotes On

Exclude matches Off

Exclude bibliography On