

The Effectiveness of Using Educational Board Games on Students' Vocabulary Mastery at Junior High School

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ABSTRACT

Purpose – This study investigates the effectiveness of educational board games in enhancing the vocabulary mastery of seventh-grade students at SMPN 24 Bandar Lampung. It aims to determine whether there is a significant difference in vocabulary achievement between students taught using board games and those taught through conventional instructional methods.

Method – The study was conducted during the second semester of the 2024/2025 academic year using a quasi-experimental design with a pre-test-post-test control group. A total of 60 students were selected through purposive sampling, with 30 students in the experimental group and 30 in the control group. The experimental group received vocabulary instruction through educational board games, while the control group was taught using conventional methods. Data were collected using a 50-item multiple-choice vocabulary test and analyzed using an Independent Samples T-test.

Findings – The analysis showed a statistically significant difference in post-test scores between the experimental and control groups, $t(58) = 8.575$, $p < 0.001$. The students in the experimental group demonstrated significantly higher vocabulary mastery, with a mean score difference of 15.867 points compared to those in the control group.

Research Implications – The results provide empirical support for the use of educational board games as an effective and engaging teaching strategy in English language learning. These games offer a structured yet enjoyable approach to vocabulary acquisition, which can enhance students' comprehension and retention of English vocabulary.

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Introduction

Vocabulary proficiency plays an essential role for effective communication and academic success in English as a Foreign Language (EFL) learning. Proficiency in EFL hinges on effective vocabulary development, enabling learners to comprehend increasingly complex texts and express themselves with clarity (Tiing & Yunus, 2021). While junior high school represents a crucial period for vocabulary development, traditional instruction often relies on rote memorization and vocabulary lists, which have proven inadequate for fostering genuine acquisition and sustained retention (Harmer, 2003).

Traditional approaches to vocabulary instruction often fail to engage students effectively, leading to limited vocabulary acquisition and retention. Rote memorization, while common, lacks contextual relevance and fails to promote deeper understanding of word usage (Syakur, 2020). Moreover, these methods often neglect the interconnectedness of vocabulary knowledge and language use, hindering the development of communicative competence (Tabassum & Naveed, 2024). The reliance on traditional methods underscores the need for innovative approaches that foster active engagement and contextual learning.

In response to these challenges, researchers have increasingly explored game-based learning as a promising alternative. Conceptually, Game-Based Learning (GBL) can be understood as the design of a learning environment that embeds curriculum objectives into the rules, challenges, and interactions of a game. James Paul Gee (Maulidina et al., 2018) argues that good games create ideal conditions for learning because they require players to understand complex systems, solve problems creatively, and continuously adapt based on the feedback they receive. Educational games, particularly board games, offer interactive and engaging learning environments that promote active participation, collaborative learning, and enhanced motivation (Hasibuan & Tanjung, 2020). Studies have shown that board games can enhance vocabulary retention, improve communication skills, and foster a positive learning atmosphere (Aufa & Zuhriyah, 2024). However, the specific impact of board educational games on vocabulary mastery at the junior high school level remains underexplored, particularly concerning the nuanced effects of different game types and design features (Pradana & Uthman, 2023).

Games facilitate effective teaching and learning (Ratminingsih, 2018). In teaching and learning, games are interactive activities with defined rules, goals, and challenges that engage students in a playful manner to achieve educational objectives. They often incorporate elements of competition, collaboration, or problem-solving to enhance motivation and knowledge retention. There is a growing interest in incorporating innovative and engaging teaching strategies to enhance vocabulary learning. Educational games, particularly board games, offer a promising alternative.

Board games are games played on a patterned board, involving the manipulation of pieces according to specific rules (Noda et al., 2019). In teaching and learning, a board game is a structured, interactive activity played on a board with defined rules and objectives. It uses game mechanics to engage students in learning, often involving strategic thinking, problem-solving, and collaboration. Unlike purely recreational board games, educational board games are specifically designed to reinforce learning concepts, practice skills, or assess understanding within a particular subject area. The game's structure and mechanics are tailored to promote active learning and knowledge retention, making the learning process more enjoyable and effective. This engaging game motivates students through enjoyable activities, effectively building vocabulary and facilitating classroom practice (Hasibuan & Tanjung, 2020). Board games provide a fun and interactive learning environment, promoting active participation and collaborative learning. The inherent challenge and competition in board games can motivate students to engage actively with vocabulary, leading to improved retention and application of newly acquired words.

Preliminary research conducted at SMPN 24 Bandar Lampung on November 07th 2024, by teacher and student interviews and classroom observations from November 07th to November 08th 2024, revealed the existence of difficult challenges during the vocabulary learning process in class. Many students experience difficulties in learning English due to a lack of vocabulary mastery, especially in meaning and how to use the vocabulary in context. As observed by one of students often have difficulty memorizing vocabulary, as well as translating vocabulary into the target language due to a lack of knowledge about vocabulary. Especially new words that are difficult to pronounce.

Based on these problems, the researcher conducts on students by applying Board games as learning media to increase students' vocabulary and efforts to students' vocabulary which is still lacking and limited. By modifying the media that has been given by the teacher, the researcher makes media that is expected to allow students to interact with each other and create a fun class so that students focus on learning vocabulary and easily remember it.

Board games can be seen as engaging tools that motivate students to participate in the teaching and learning process. Focused learning by making the experience less coercive and more enjoyable, as students feel less pressured to learn (Larasati & Faridi, 2017). Board games have emerged as a powerful pedagogical tool, offering a captivating approach to engaging students in the learning process. Their ability to foster intrinsic motivation stems from their inherent entertainment value, which transforms the classroom environment into a dynamic and interactive space. By seamlessly blending learning objectives with playful elements, board games effectively minimize the perception of forced learning, encouraging students to actively participate without feeling coerced. This shift in learning dynamics promotes greater focus and engagement,

ultimately leading to a more enriching and effective educational experience. In other words, board games provide an engaging and fun learning experience that engages students' brainpower as well as good teamwork in completing a game well.

Methods

This study employed a quantitative method, utilizing a method for objectively assessing theories across multiple variables. Quantitative research aims to measure and express data numerically, allowing for generalization of findings from a sample to broader populations (Ghanad, 2023). This study employed a quasi-experimental design. This approach is distinguished from a true experiment by its lack of random assignment of participants to the experimental and control groups. Consequently, this design presents inherent limitations in controlling for extraneous variables that could potentially influence the research outcomes (Noviadana et al., 2021). The experimental design is illustrated in the following chart:

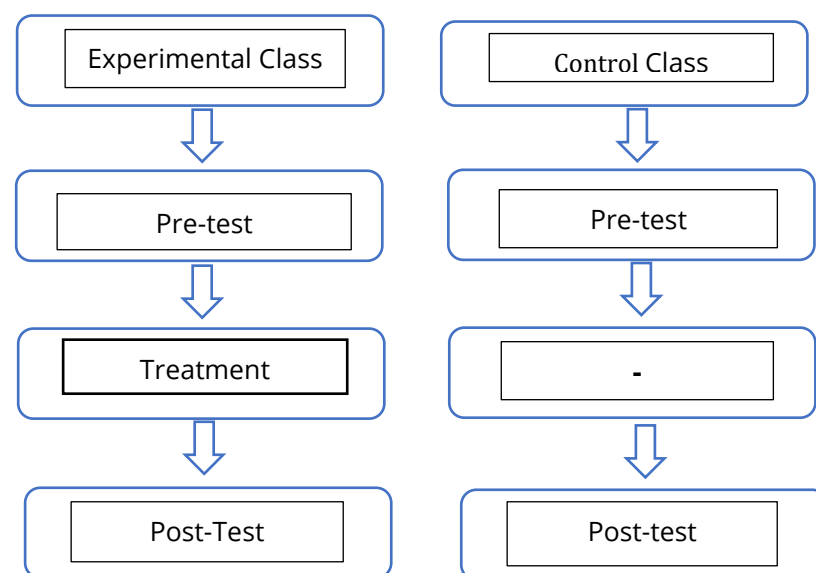


Figure 1. Experimental Desain Research

The population of this study comprised all seventh-grade students at SMPN 24 Bandar Lampung during the 2024/2025 academic year. The sample consisted of 60 students from two intact classes, selected using purposive sampling. This technique was chosen based on the recommendation of the English teacher, who identified two classes with comparable academic proficiency levels. Class VII 1 (N=30) was assigned as the experimental group, and class VII 2 (N=30) served as the control group.

The research was conducted over four meetings during the second semester. The procedure was as follows, permission and pre-test. After obtaining permission from the school, both the experimental and control groups were administered a pre-test to measure their initial vocabulary mastery. Experimental group, this group received two

treatment sessions using the educational board game. In each session, students played in small groups, where they were required to define, use, or spell vocabulary words (nouns, verbs, and adjectives) to advance on the board. The researcher acted as a facilitator, guiding the game and ensuring active student participation. Each session lasted for 3x40 minutes. Control group, this group received instruction using vocabulary material using conventional teaching methods, using media picture card to learn vocabulary words. Post-test, following the treatment phase, both groups were administered a post-test to assess the change in their vocabulary mastery.

The instrument for data collection was a vocabulary test consisting of 50 multiple-choice items, designed to assess students' mastery of nouns, verbs, and adjectives. A correct answer was awarded 4 points, and an incorrect answer received 0 points, with a maximum possible score of 100. Prior to its use, the instrument underwent validity and reliability testing, and the results confirmed that the instrument was valid and reliable for data collection.

The collected data were analyzed using SPSS version 27. The analysis involved prerequisite testing, normality and homogeneity tests were conducted to ensure the data met the assumptions for parametric testing. An Independent Samples T-test was employed to compare the mean post-test scores of the experimental and control groups to determine if there was a statistically significant difference.

Ethical standards were maintained throughout the research process. Official permission to conduct the study was secured from the headmaster of SMPN 24 Bandar Lampung. Furthermore, informed consent was obtained from the students' guardians, and students were assured that their participation was voluntary and their data would remain confidential and anonymous.

Result

This section presents the results of quantitative data analysis to test the effectiveness of using board games in improving students' vocabulary mastery. The presentation of results begins with a test of the validity and reliability of the instruments, followed by the main findings of the study, which include descriptive statistics and hypothesis testing.

The validity test results showed that 50 items met the validity criteria (calculated r value $>$ table r value of 0.361). These 50 valid items were then tested for reliability and yielded a Cronbach's Alpha value of 0.921. Thus, the instrument used in this study is valid and highly reliable for measuring students' vocabulary mastery.

Tabel 1. Test of Validity

Question Number	rCount	Question Status
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1,3,5,6,7,8,9,12,13,15.	(0,527) (0,429) (0,453) (0,492) (0,489) (0,541) (0,452) (0,421) (0,408) (0,393)	Valid
17,18,19,20,24,25,26,27,30,29.	(0,422) (0,462) (0,526) (0,396) (0,431) (0,474) (0,438) (0,368) (0,417) (0,625)	Valid
31,32,34,35,36,37,38,39,40,42.	(0,426) (0,366) (0,514) (0,452) (0,406) (0,501) (0,467) (0,391) (0,591) (0,395)	Valid
43,44,45,46,49,51,52,54,56,57.	(0,542) (0,387) (0,470) (0,417) (0,408) (0,378) (0,417) (0,421) (0,379) (0,453)	Valid
58,59,60,62,63,64,66,68,73,76.	(0,480) (0,385) (0,462) (0,373) (0,372) (0,546) (0,508) (0,456) (0,397) (0,415)	Valid
2, 4, 10, 11, 14, 16, 21, 22, 23, 28.	(0,269) (0,268) (0,330) (0,258) (0,298) (0,316) (0,320) (0,359) (0,257) (0,359)	Invalid
33, 41, 47, 48, 50, 53, 55, 61, 65, 67.	(0,288) (0,349) (0,357) (0,349) (0,337) (0,338) (0,306) (0,354) (0,360) (0,339)	Invalid
69, 70, 71, 72, 74, 75, 77, 78, 79, 80.	(0,288) (0,270) (0,284) (0,093) (0,053) (0,187) (0,196) (0,199) (0,223) (0,124)	Invalid

After conducting a validity test and ensuring the items to be used, a reliability test was then conducted to measure the internal consistency of the research instrument. The reliability test shown in table 2 below:

Tabel 2. Test of Reliability

Cronbach's Alpha	N of Items
.921	50

The reliability analysis results show a Cronbach's Alpha value of .921. Based on general interpretation criteria, an Alpha value greater than 0.90 indicates an excellent level of reliability. The Shapiro-Wilk test was applied to ensure that the data was normally distributed. The complete results of this test can be found in Table 3:

Tabel 3. Test of Normality

Kolmogorov-Smirnova ^a				Shapiro Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Experimental Pre-test	.120	30	.200*	.969	30	.510
Experimental Post-test	.123	30	.200*	.976	30	.724
Control Class Pre-test	.156	30	.060	.966	30	.444
Control Class Post-test	.120	30	.200*	.969	30	.510

The normality assumption test was conducted on the pre-test and post-test scores of both research groups. Table 4 presents the results of the Shapiro-Wilk test, which is more suitable for this sample size (N=30). The results show significance values (Sig.) above 0.05 for all data groups (experimental group: pre-test p=0.510, post-test p=0.724; control group: pre-test p=0.444, post-test p=0.510). These findings indicate that all data are

normally distributed, thus meeting the criteria for further parametric statistical analysis. The homogeneity test as illustrated in table 4 below:

Tabel 4. Test of Homogeneity of Variance

	Levene Statistic	df1	df2	Sig.
Based on Mean	.124	3	116	.945
Based on Median	.105	3	116	.957
Based on Median and with adjusted df	.105	3	115.664	.957
Based on trimmed mean	.130	3	116	.942

Test for Homogeneity of Variance was applied to check whether the variance of scores in the experimental and control groups was equivalent. As shown in the table, the significance value (Sig.) obtained from the test based on the mean is 0.945. The assumption of variance homogeneity is fulfilled, as evidenced by the significance value exceeding 0.05. The fulfillment of this assumption supports the validity of using the Independent Samples t-Test analysis. As illustrated in table 5 below:

Tabel 5. t-Test: Paired Two Sample for Means

	Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	.011	.917	8.575	58	<.001	15.867	1.850	12.163	19.571
Equal variances not assumed			8.575	57.908	<.001	15.867	1.850	12.163	19.571

Referring to Table 6, it can be seen that the results of the analysis revealed that the intervention given to the experimental group had a significant impact. There was a very significant difference in post-test scores between the experimental and control groups ($t(58) = 8.575$, $p < 0.001$), with the experimental group showing an average score 15.87 points higher.

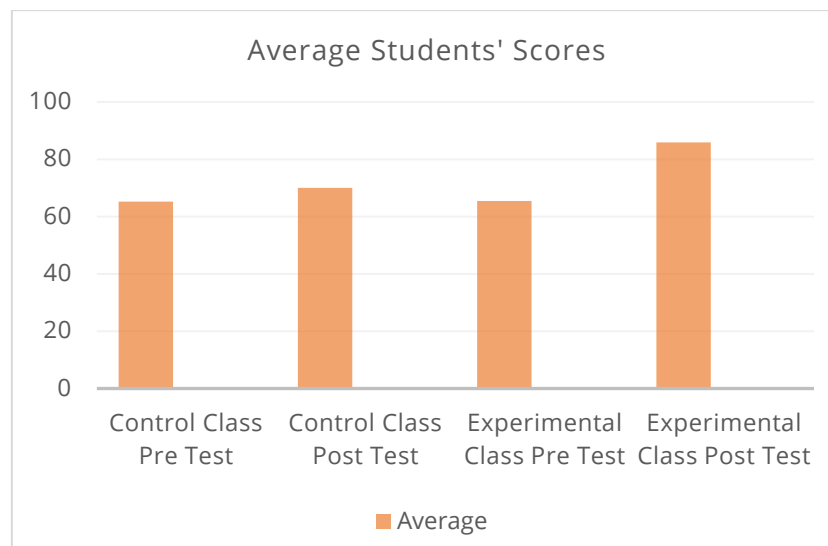


Figure 2. Average Student Scores

This graph presents a comparison of students' average scores before (pre-test) and after (post-test) the treatment. The main notable result is the drastic increase in scores in the experimental group, where the average score increased significantly after the intervention. In contrast, the control group showed only a minimal increase in scores. Both groups had nearly equivalent initial scores (pre-test), reinforcing the conclusion that the significant difference in final scores was due to the intervention provided. In addition to statistical significance, the effect size was also calculated to determine the practical significance of the intervention. Using Cohen's d , a value of Cohen's $d = 2.25$ was obtained. According to general interpretation criteria, this value indicates a very large effect. This means that the use of board games not only produces statistically significant differences but also has a very large practical impact in improving students' vocabulary mastery.

Discussion

The board game is a learning media that provides a different learning experience to students. Providing an understanding of learning in a different way that still pays attention to the needs of students and how students learn. That way many skills are gained from learning using board games such as achieving English language learning which includes learning vocabulary both new vocabulary and vocabulary that has been mastered. Based on data analysis, the results obtained show that the implementation of board games contributed to increased student engagement as well as confidence. Furthermore, the board game was also shown to trigger increased interaction and discussion among students (Cheng, 2018).

This study shows that the use of educational board games is significantly more effective in improving students' vocabulary mastery than conventional learning methods ($t(58) = 8.575$, $p < 0.001$). These findings not only confirm the research hypothesis but also

provide strong empirical evidence of the potential of game-based media in language learning. The significant improvement in the experimental group can be explained through several psychological and pedagogical mechanisms inherent in board games.

First, board games transform the learning process from passive memorization to active cognitive processing. Unlike traditional methods that often rely on rote memorization, games require students to actively use target vocabulary to make decisions, solve problems, and achieve game objectives. This aligns with the concept of “desirable difficulties” which states that learning is more enduring when the process is cognitively challenging (Bjork & Bjork, 2020). In this context, board games create enjoyable challenges, forcing students to process the meaning of vocabulary more deeply, rather than merely recognizing its form.

Second, the social interaction aspect of board games facilitates collaborative learning. Our findings are consistent with a study in the *Journal of Applied Linguistics*, which found that peer scaffolding (peer assistance) is highly effective in the context of game-based language learning (Zeng et al., 2025). During the game, students naturally discuss, negotiate meaning, and correct each other in a non-intimidating environment. This interaction creates Vygotsky's Zone of Proximal Development (ZPD), where students can achieve a higher level of understanding with the help of their peers, something that is not facilitated by more individualistic picture card media.

Third, board games have been shown to reduce language anxiety and increase intrinsic motivation. This finding supports research by (Jones, 2018) in *TESOL Quarterly* linking gamification to a reduction in the “affective filter” . The relaxed and enjoyable atmosphere encourages students to take risks in using new vocabulary without fear of making mistakes. Game mechanics such as points, turns, and surprise elements, as discussed by (De Freitas, 2018), maintain high levels of engagement, which in turn enhance attention and retention of material. This explains why students not only learn more vocabulary but also tend to remember it in the long term, a finding also supported by (Cardinot & Fairfield, 2021) research in *Language Learning & Technology*.

Although the results are positive, it is important to acknowledge some limitations in this study. The uniqueness effect, a significant improvement in the experimental group, may have been partly influenced by the students' enthusiasm for a new and different learning method. It is difficult to separate the pedagogical impact of board games from this uniqueness effect in a short-term study. Generalization of results, this study was conducted in one school with a relatively small sample size. Therefore, the ability to generalize these findings to other school contexts with different student demographics or resources remains limited. Researcher influence, the researcher, who also acted as the teacher in the experimental class, may have unconsciously demonstrated greater enthusiasm, which could act as a confounding variable.

These findings offer several practical implications for educators and curriculum developers. For teachers, teachers are encouraged to integrate board games as powerful pedagogical tools, not just as side activities. However, the selection or design of board games must be carefully aligned with learning objectives, ensuring that their mechanisms directly support the mastery of targeted material. For curriculum developers, there is an opportunity to design game-based learning modules that can be adapted for various topics and grade levels. Rather than relying on a single type of game, the curriculum can include a portfolio of games with varying levels of complexity to maintain student engagement over time. and finally to precise knowledge regarding vocabulary aspects (Kilic, 2019). This aligns with the importance of vocabulary as the foundation of English comprehension and as a crucial element for effective communication (Permatasari et al., 2022). By making vocabulary learning an integral part of engaging gameplay, board games prove to be a powerful pedagogical tool.

Conclusion

This study concludes that the use of educational board games is significantly effective in improving the vocabulary mastery of junior high school students. The main contribution of this study is the provision of strong empirical evidence in this specific context, confirming that board games are not merely enjoyable complementary activities, but valid pedagogical tools for achieving measurable learning outcomes that surpass conventional teaching methods.

Practically, these findings imply that educators can confidently integrate board games as a vocabulary teaching strategy to create a more dynamic, interactive, and collaborative learning environment. The key to success lies in selecting or adapting games that are relevant to learning objectives to maximize student engagement and motivation.

For future research, it is recommended to explore several areas further. Longitudinal studies could be conducted to test long-term vocabulary retention, while the use of mixed-methods designs could provide a richer understanding of the interaction processes during gameplay. Additionally, research comparing the effectiveness of various game mechanics (e.g., competitive vs. cooperative) and using instruments that measure productive vocabulary skills (speaking and writing) would greatly enrich the literature in this field.

In conclusion, while acknowledging its limitations, this study provides strong evidence that board games are effective pedagogical tools for improving vocabulary acquisition. By creating an active, interactive, and motivating learning environment, board games successfully overcome the weaknesses of conventional learning methods. These findings encourage education practitioners to more seriously consider and integrate game-based learning into their teaching practices.

References

- Aufa, M. I., & Zuhriyah, M. (2024). Effectiveness of Using Board Race Games To Enhance Students' Vocabulary Mastery. *E-Link Journal*, 11(1), 30–43. <https://doi.org/10.30736/ej.v11i1.1043>
- Bjork, R. A., & Bjork, E. L. (2020). Desirable Difficulties in Theory and Practice. *Journal of Applied Research in Memory and Cognition*, 9(4), 475–479. <https://doi.org/10.1016/j.jarmac.2020.09.003>
- Cardinot, A., & Fairfield, J. A. (2021). Game-Based Learning to Engage Students with Physics and Astronomy Using a Board Game. *Research Anthology on Developments in Gamification and Game-Based Learning*, 2–4, 785–801. <https://doi.org/10.4018/978-1-6684-3710-0.ch035>
- Cheng, Y. (2018). The Effect Of Using Board Games In Reducing Language Anxiety And Improving Oral Performance. *Electronic Theses and Dissertations*, 899. <https://egrove.olemiss.edu/etd/899>
- De Freitas, S. (2018). International Forum of Educational Technology & Society Are Games Effective Learning Tools? A Review of Educational Games. *Source: Journal of Educational Technology & Society*, 21(2), 74–84. <https://about.jstor.org/terms>
- Ghanad, A. (2023). An Overview of Quantitative Research Methods. *International Journal of Multidisciplinary Research and Analysis*, 06(08), 3794–3803. <https://doi.org/10.47191/ijmra/v6-i8-52>
- Harmer, J. (2001). The practice of English language teaching. *London/New York*, 32(1), 401–405.
- Hasibuan, A., & Tanjung, S. (2020). *The Effect of Using Board Game on Students' Vocabulary mastery (A Study at the Eighth Grade Students of SMP Negeri 2 Saipar Dolok Hole 2019 / 2020 Academic Year)*. 2(4), 12–26.
- Jones, A. (2018). Immersion Versus Engagement Strategies: Examining the Effects on Conversational Competence Amongst Korean Students in an Intensive English Program. *Journal of Language Teaching and Research*, 9(4), 665–674. <https://doi.org/10.17507/jltr.0904.01>
- Kilic, M. (2019). Vocabulary Knowledge as a Predictor of Performance in Writing and Speaking: A Case of Turkish EFL Learners. *Pasaa*, 57(1), 133–164. <https://doi.org/10.58837/chula.pasaa.57.1.6>
- Larasati, N., & Faridi, A. (2017). The Effectiveness of Simulation Board Game to Improve Speaking Skill in Descriptive Text. *Journal of English Language Teaching*, 6(1), 82–89. <http://journal.unnes.ac.id/sju/index.php/elt>
- Maulidina, M., Susilaningsih, S., & Abidin, Z. (2018). Pengembangan Game Based Learning Berbasis Pendekatan Saintifik pada Siswa Kelas IV Sekolah Dasar. *JINOTEP (Jurnal Inovasi Dan Teknologi Pembelajaran) Kajian Dan Riset Dalam Teknologi Pembelajaran*, 4(2), 113–118. <https://doi.org/10.17977/um031v4i22018p113>

- Noda, S., Shiotsuki, K., & Nakao, M. (2019). The Effectiveness of Intervention with Board Games: A Systematic Review. *BioPsychoSocial Medicine*, 13(1). <https://doi.org/10.1186/s13030-019-0164-1>
- Noviadana, S. I., Suhardini, A. D., & Inten, D. N. (2021). Pengaruh Permainan Papan Perkenalan terhadap Kemampuan Berbicara Anak Usia 5-6 Tahun di TK X Kabupaten Bandung. *Jurnal Riset Pendidikan Guru Paud*, 1(1), 54-61. <https://doi.org/10.29313/jrpgp.v1i1.224>
- Permatasari, P., Sudirman, A., & Munawaroh, T. (2022). The Effect of Using Duolingo Application Towards Students' Vocabulary Mastery at the Eighth Grade of SMPN 2 Banjarsari Lebak-Banten. *Journal of English Language Learning*, 6(2), 142-148. <https://doi.org/10.31949/jell.v6i2.3624>
- Pradana, M. D., & Uthman, Y. O. O. O. (2023). Development of Aqidah Akhlak Learning Media" Board Game Based on Education Fun on the Theme of Commendable Morals (E-Fun A2M)" for High School Students. *Assyfa Learning Journal*, 1(1), 25-36.
- Ratminingsih, N. M. (2018). Implementasi Board Games Dan Pengaruhnya Terhadap Hasil Belajar Bahasa Inggris. *Jurnal Ilmu Pendidikan*, 24(1), 19. <https://doi.org/10.17977/um048v24i1p19-28>
- Syakur, M. A. (2020). The use of board game in teaching speaking to young learners. *English Education: Journal of English Teaching and Research*, 5(2), 149-155.
- Tabassum, A., & Naveed, A. (2024). Interactive strategies for Enriching English as a Foreign Language (EFL) Vocabulary: A Comprehensive Exploration. *Journal of Applied Linguistics and Language Research*, 11(1), 1-16.
- Tiing, C. W. H., & Yunus, M. M. (2021). Board Games in Improving Pupils' Speaking Skills: A Systematic Review. *Sustainability (Switzerland)*, 13(16). <https://doi.org/10.3390/su13168772>
- Zeng, Y., Kuo, L. J., Chen, L., Lin, J. A., & Shen, H. (2025). Vocabulary Instruction for English Learners: A Systematic Review Connecting Theories, Research, and Practices. *Education Sciences*, 15(3), 262.