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Implementing Word Card Media Using Kahoot! to Improve English Reading Comprehension

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ABSTRACT

This study determined the effectiveness of word card media using Kahoot! on Class VII students' reading comprehension at SMPN 4 Majene and investigated their perceptions. A true-experimental design was employed with two intact classes ($n = 25$ each) selected via cluster random sampling. Data were collected through reading pre-/post-tests and a 10-item questionnaire administered to a purposive subsample of the 10 highest-scoring experimental students. Results revealed that the experimental class post-test mean (73.72) significantly exceeded the pre-test mean (31.92), with an N-Gain mean of 61.41. The independent samples t-test confirmed a statistically significant difference ($p = 0.00 < 0.05$), validating H_1. Additionally, the high-achieving subsample demonstrated positive perceptions (mean = 66.8), strongly agreeing that the media improved text comprehension, boosted confidence in group discussions, and enhanced learning satisfaction. Thus, word card media integrated with Kahoot! is highly effective for junior high school EFL reading instruction, although these perception findings are localized to top-performing learners and cannot be generalized to the entire class.

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INTRODUCTION

Mastering a foreign language requires more than just knowing vocabulary; it involves a sophisticated mental activity to grasp intended meanings. In this regard, reading comprehension is viewed as skill is needed by students to be able to answer questions related to texts (Rochimah & Muslim, 2021). In the Indonesian context, literacy rates remain a concern, with students frequently struggling to comprehend English texts due to significant structural differences between Indonesian and English. This is further complicated by the fact that the shift towards digital pedagogy requires teachers to not only master content but also integrate technology effectively to foster student interest (Hustiana, et al., 2025). In line with this challenge, a preliminary observation at SMPN 4 Majene revealed that Class VII students exhibited severely limited reading comprehension, primarily attributable to insufficient vocabulary and disengagement with traditional instructional methods. Students found conventional reading activities monotonous and could not adequately identify main ideas or answer comprehension questions. This gap necessitated an innovative, technology-integrated approach to instruction.

Several studies have examined the use of Kahoot! in reading instruction. Wibisono (2019) found significant improvement in reading comprehension among tenth graders using Kahoot!. Marsa et al., (2021) reported high impact on engagement, perception, and motivation through Kahoot!-mediated reading instruction. (Korkmaz, 2021) demonstrated significant improvements in EFL reading comprehension after Kahoot! interventions. Nugroho (2021) applied Kahoot! in a seventh-grade classroom action research, yielding improvements in identifying implicit information. The efficacy of such digital tools aligns with the broader trend of empowering e-learning to enhance English literacy development, where interactive platforms serve as a bridge to better student outcomes (Isma et al., 2024). Collectively, these studies confirm Kahoot!'s potential as an interactive learning tool. Word card media, as described by Wiropati et al., (2017), functions as graphical word media that simultaneously provides pictorial and lexical stimuli, facilitating vocabulary acquisition and sentence comprehension.

Prior research has explored Kahoot! in general reading instruction and at secondary and tertiary levels; however, no study has specifically examined the combination of word card media with Kahoot! as an integrated intervention at the junior high school (SMP) level in Majene, West Sulawesi, Indonesia. Moreover, the implementation of such contextual and technology-based media is crucial in addressing the diverse needs of students in local Indonesian classrooms (Bohang et al., 2025). Additionally, existing studies predominantly employed either qualitative or purely quantitative designs, without triangulating test-based outcomes with student perception data using rating scales.

The integration of word card media with Kahoot! addresses two identified barriers to reading comprehension: insufficient vocabulary knowledge and low student engagement. Word card media builds lexical knowledge through visual-word association, while Kahoot! provides a game-based, real-time competitive environment that increases motivation. This synergy represents a form of professional teacher competence in developing creative learning media to overcome classroom passivity (Hustiana, et al., 2025). Together, they create a synergistic instructional approach aligned with mobile learning trends and students' digital literacy.

This study aimed (1) to determine whether word card media using Kahoot! can improve reading comprehension of SMPN 4 Majene Class VII students, and (2) to describe students' perceptions of the implementation. By focusing on these objectives, the research supports the integration of educational technology (EdTech) as a transformative force in modern EFL classrooms (Amrang & Hustiana, 2025). The findings contribute to EFL pedagogy by demonstrating an evidence-based, technology-integrated instructional model suitable for resource-limited junior high school settings in Indonesia, ensuring that English language learning remains sustainable and accessible even in diverse regional areas (Asdar et al., 2024).

METHODS

Research Design

This study employed a quantitative approach with a true-experimental design, using pre-test and post-test measurements for both an experimental and a control class. The research design is represented as follows: the experimental class (A) received the treatment (X) and underwent pre-test (O1) and post-test (O2), while the control class (B) underwent pre-test (O3) and post-test (O4) without the treatment.

Research Context and Sampling Method

The research was conducted at SMPN 4 Majene (Baurung, Banggae Timur District, Majene Regency, West Sulawesi) in November–December 2024. The total population comprised 76 Class VII students across three classes (VII A = 25, VII B = 26, VII C = 25). Using cluster random sampling, Class VII C was designated as the experimental group (n = 25) and Class VII A as the control group (n = 25).

Instruments and Measures

Two instruments were used. First, a reading comprehension test consisting of 15 multiple-choice items across four simple past tense narrative texts (Porseni Experience, Camping on the Beach, Singing Competition, Making Fried Rice for the First Time), administered as pre-test and post-test. Scores were classified on a five-point scale: Very Poor (0–39), Poor (40–55), Fair (56–65), Good (66–79), and Very Good (80–100). Second, a 10-item Likert-scale questionnaire (5 positive, 5 negative items) with indicators of Understanding and Evaluation, administered to the 10 highest-scoring experimental class students post-test. Responses were scored on a 5-point scale (Strongly Agree = 5 to Strongly Disagree = 1) and converted to a rating scale percentage (60–79.99% = Positive).

Procedures of data collection

Data collection occurred over six meetings. In the first meeting, a pre-test was administered to both classes. In meetings 2–5, the experimental class received four treatment sessions using word card media integrated with Kahoot!, covering topics: (1) Porseni Experience, (2) Camping on the Beach, (3) Singing Competition, and (4) Making Fried Rice for the First Time. For each treatment, students were divided into groups of 4–5, the Kahoot! interface was projected on an LCD screen, and students engaged with reading texts and multiple-choice/true-false questions via their devices. The control class continued with conventional reading instruction during this period. In the sixth meeting, both classes completed the post-test. The

questionnaire was then administered to a non-random, purposive subsample consisting of the 10 highest-scoring experimental class students post-test to gain insights specifically from high-achieving learners.

Data Analysis

Descriptive statistics (mean, standard deviation, frequency, percentage) were computed using SPSS. Prerequisite tests included the Shapiro-Wilk normality test (criterion: Asymp. Sig. > 0.05 for normal distribution) and the homogeneity of variance test (criterion: Sig. > 0.05 for homogeneous data). Hypothesis testing used an independent samples t-test; H1 was accepted if Sig.(2-tailed) < 0.05. Learning gain was quantified using N-Gain scores. To determine the magnitude of the treatment's effect, Cohen's d effect size was calculated and interpreted based on Cohen's criteria: small (0.2), medium (0.5), and large (0.8). Questionnaire data were analyzed through frequency counts, percentage calculations, and overall rating scale averages.

FINDINGS

This section presents findings from the quasi-experimental study examining word card media using Kahoot! can improve reading comprehension of SMPN 4 Majene Class VII students. We organize results according to the two research questions, beginning with quantitative learning outcomes followed by student perception data.

Effectiveness of Word Card Media Using Kahoot! in Improving Reading Comprehension

This section presents the research findings obtained through test instruments administered to 50 students of Class VII at SMPN 4 Majene, West Sulawesi, conducted from November 11 to December 12, 2024 across six instructional meetings. Students were divided into a control class (VIIA, n=25) receiving conventional instruction, and an experimental class (VIIC, n=25) receiving instruction with Word Card Media integrated with the Kahoot! application. Data were collected through a pre-test and post-test consisting of 15 multiple-choice questions, a normality test, a homogeneity test, an independent samples t-test, an N-Gain analysis, and a student perception questionnaire.

Pre-Test and Post-Test Results

Both classes were administered a pre-test prior to instruction and a post-test upon completion. The following table consolidates the descriptive statistics of all four data sets for comparative purposes.

Table 1. Consolidated Descriptive Statistics: Control and Experimental Classes (Pre-Test and Post-Test)

Parameter	Control Pre-test	Control Post-test	Experimental Pre-test	Experimental Post-test
N	25	25	25	25
Mean	23.96	55.92	31.92	73.72
Std. Deviation	10.530	12.416	12.352	13.801
Lowest Score	6	33	6	46
Highest Score	53	86	60	93

As shown in Table 1, the control class demonstrated a mean increase from 23.96 (pre-test) to 55.92 (post-test), reflecting a gain of 31.96 points. The experimental class showed a more pronounced increase, from a mean of 31.92 (pre-test) to 73.72 (post-test), a gain of 41.80 points. It is notable that the experimental class pre-test mean was slightly higher than that of the control class, which may suggest marginal pre-existing differences in reading ability between the two groups. However, the substantially larger post-test gain in the experimental class demonstrates the relative effectiveness of the treatment. The standard deviation in the experimental post-test (13.801) indicates a wider spread of scores compared to the control post-test (12.416), which may suggest that while most students benefited considerably from the intervention, some students experienced more modest gains.

Score Category Distribution

To provide a more nuanced picture of student achievement, scores were classified into five categories: Very Good (80–100), Good (66–79), Fair (56–65), Poor (40–55), and Very Poor (00–39). The tables below consolidate the pre-test and post-test category distributions for each class.

Table 2. Category Distribution: Control Class (Pre-Test and Post-Test)

No.	Interval	Category	Pre-F	Pre-%	Post-F	Post-%
1	80–100	Very Good	0	0%	1	4%
2	66–79	Good	0	0%	6	24%
3	56–65	Fair	1	4%	5	20%
4	40–55	Poor	3	12%	12	48%
5	00–39	Very Poor	21	84%	1	4%

In the control class pre-test, 84% of students fell in the Very Poor category. After conventional instruction, the post-test distribution improved moderately—the Very Poor category dropped to 4%, while the Poor category became dominant at 48%. Only 4% reached the Very Good category, indicating limited instructional effectiveness without the media intervention.

Table 3. Category Distribution: Experimental Class (Pre-Test and Post-Test)

No.	Interval	Category	Pre-F	Pre-%	Post-F	Post-%
1	80–100	Very Good	0	0%	12	48%
2	66–79	Good	0	0%	8	32%
3	56–65	Fair	1	4%	1	4%
4	40–55	Poor	8	32%	4	16%
5	00–39	Very Poor	16	64%	0	0%

In contrast, the experimental class pre-test showed 64% of students in the Very Poor category and 32% in Poor. After instruction with Word Card Media using Kahoot!, the post-test revealed a dramatic shift: 48% of students achieved Very Good and 32% achieved Good, with no students remaining in the Very Poor category. This represents a transformative improvement in which 80% of students reached the upper two proficiency bands.

Prerequisite Testing: Normality and Homogeneity

Before inferential statistical analysis was conducted, normality and homogeneity tests were performed on the pre-test and post-test data to ensure that parametric assumptions were met. The Shapiro-Wilk test was used for normality, while Levene's test was applied for homogeneity.

Table 4. Normality and Homogeneity Test Results

Test	Class	Sig. Value	Conclusion
Normality	Control & Experimental (Pre & Post)	Asymp. Sig. > 0.05	Data normally distributed
Homogeneity	Control & Experimental	Sig. = 0.235 > 0.05	Data is homogeneous

The results confirmed that all data sets were normally distributed (Asymp. Sig. > 0.05) and that the variance between classes was homogeneous (Sig. = 0.235 > 0.05). These findings validated the subsequent use of parametric statistical tests, specifically the independent samples t-test.

Hypothesis Testing and N-Gain Analysis

The hypothesis of the study was tested using the Independent Samples T-test to compare post-test scores between the control and experimental classes. Additionally, the Normalized Gain (N-Gain) score was calculated to assess the magnitude of learning improvement relative to each class's initial pre-test performance.

The N-Gain formula used was: N-Gain = (Post-test Score − Pre-test Score) / (Maximum Score − Pre-test Score) × 100. This formula allows for a fairer comparison of improvement across students who began with varying baseline scores. N-Gain categories used were: Very Good (76–100), Good (51–75), Fair (26–50), and Less (0–25).

Table 5. Hypothesis Test (Independent Samples T-Test) and N-Gain Scores

Parameter	Control N-Gain	Experimental N-Gain	Ind. Samples Test Sig. (2-tailed)	Decision
Mean	41.90	61.41	0.00 < 0.05	H1 Accepted
Median	42.55	63.51	—	—
Std. Deviation	16.272	18.382	—	—
Min Score	—	27 (Fair)	—	—
Max Score	—	90 (Very Good)	—	—
Cohen's d	—	1.36	—	Large effect

The independent samples t-test yielded a significance value of 0.00 ($p < 0.05$), leading to rejection of the null hypothesis (H0) and acceptance of the alternative hypothesis (H1). Furthermore, the effect size calculation yielded a Cohen's d value of 1.36, indicating that the integration of Word Card Media using Kahoot! had a large and highly meaningful effect on students' reading comprehension outcomes compared to the conventional method. This confirms that there is a statistically significant difference in reading comprehension outcomes between students taught with Word Card Media using Kahoot! and those taught through conventional methods. The N-Gain analysis further supports this conclusion: the experimental class achieved a mean N-Gain of 61.41 (Good category), compared to 41.90 (Fair category) in the control class—a difference of 19.51 points. The experimental class also achieved a maximum N-Gain of 90 (Very Good), with a minimum of 27 (Fair), indicating that even the lowest-performing students in the experimental class made meaningful gains.

Student Perceptions of Word Card Media Using Kahoot!

Student perceptions were measured using a ten-item Likert-scale questionnaire administered to a sample of ten students from the experimental class. Questionnaire items were grouped into two indicators: Understanding (items 1, 4, 8, 9) and Evaluation (items 2, 3, 5, 6, 7, 10). Items 1–5 were positively worded, while items 6–10 were negatively worded. The rating scale analysis yielded an average score of 66.8, which falls within the positive criteria range. The table below presents a consolidated summary of all ten questionnaire items.

Table 6. Student Perception Questionnaire: Frequency Distribution of Responses (%)

SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree. (+) Positive item; (−) Negative item.

No.	Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)
1	Word card + Kahoot! helps me understand text more easily (+)	—	—	—	10	90
2	I want to use this media in other reading classes (+)	—	—	—	30	70
3	Word card + Kahoot! can improve my reading comprehension (+)	—	—	—	60	40
4	I feel more confident discussing in groups when using Kahoot! (+)	—	—	—	70	30
5	I am satisfied with quiz scores from using Kahoot! (+)	—	—	10	90	—
6	Kahoot! did NOT improve my ability to complete reading tests (−)	—	60	30	10	—

7	It took me longer to answer questions even with Kahoot! (−)	—	70	20	10	—
8	Kahoot! makes me feel like just playing, not learning (−)	—	80	20	—	—
9	Kahoot! is less fun due to difficulty and time constraints (−)	—	80	20	—	—
10	Kahoot! does NOT help me remember text information better (−)	20	70	10	—	—

For the Understanding indicator, 90% of students strongly agreed that Word Card Media using Kahoot! helped them understand text more easily (Item 1). Item 4 showed that 70% agreed and 30% strongly agreed that they felt more confident in group discussions, indicating a positive effect on collaborative learning. For negatively worded items, 80% disagreed that Kahoot! made them feel like they were merely playing (Item 8), and 80% disagreed that time constraints made the application less enjoyable (Item 9), confirming that students perceived the learning experience as both educationally meaningful and engaging.

For the Evaluation indicator, 70% strongly agreed (Item 2) that they wish to continue using the media in other reading classes. Item 3 revealed that 100% of students either agreed (60%) or strongly agreed (40%) that the media improved their reading comprehension. Item 5 showed 90% agreed with their quiz results. For the negative items, 60% disagreed that Kahoot! did not improve their test-taking ability (Item 6); 70% disagreed that Kahoot! made them answer questions more slowly (Item 7); and 90% (70% Disagree + 20% Strongly Disagree) disagreed that the media did not help them remember textual information (Item 10). Taken together, these data strongly affirm positive perceptions among the high-achieving subsample of students across both indicators. However, since this subsample represents only the top performers, these findings cannot be generalized to reflect the perceptions of the entire experimental class.

DISCUSSION

Effectiveness of Word Card Media Using Kahoot! in Improving Reading Comprehension

The findings of this study unequivocally demonstrate that the integration of Word Card Media with the Kahoot! platform produced statistically and educationally significant improvements in the reading comprehension of Class VII students at SMPN 4 Majene. The experimental class's post-test mean of 73.72 substantially exceeded the control class's post-test mean of 55.92, and the N-Gain analysis positioned the experimental class in the Good category (61.41) compared to the Fair category (41.90) for the control class. These results are corroborated by the independent samples t-test (Sig. = 0.00 < 0.05), which confirms statistical significance.

The pedagogical rationale for these outcomes lies in the synergistic design of the two media components. Word card media operates on the premise of vocabulary-based scaffolding: by presenting lexical items visually through individual cards, students are required to actively associate written forms with their meanings. As Akubuilo et al., (2015) noted, word card media facilitates literacy readiness by making letter-symbol relationships more accessible, thus lowering the cognitive load associated with decoding unfamiliar words. Furthermore, recent research by (Sayenti & Wiarta, 2024) highlights that the use of word card media significantly improves children's ability to recognize letter symbols and increases their learning independence, as the visual nature of the cards allows for more autonomous exploration.

The Kahoot! platform augmented this scaffolding through gamification. Kahoot! functions as a student-response system that delivers teacher-created quizzes in a competitive, time-limited, and visually stimulating format. The game-based design aligns with principles of situated learning and motivational theory: students are intrinsically motivated to engage with reading texts in order to retrieve correct answers and earn points, transforming passive reading into an active, purposeful activity. This is consistent with findings that there were significant improvements in reading comprehension and student engagement following Kahoot! Implementation (Korkmaz, 2021; Nugroho, 2021; Rochimah & Muslim, 2021; Setiawan, 2020).

A particularly important dimension of this study is the role of vocabulary acquisition in comprehension gains. Prior to the intervention, students frequently misunderstood high-frequency content words such as running, dancing, competition, and experience vocabulary central to the narrative texts used in assessments.

Through repeated exposure via word cards integrated into Kahoot! quiz items, students developed stronger form-meaning mappings. This aligns with (Sayenti & Wiarta, 2024), who demonstrate that visual-based word media effectively reduces the cognitive load required for letter-symbol recognition while simultaneously fostering learning independence. Consequently, the use of such interactive tools not only clarifies high-frequency content words but also ensures long-term lexical retention by creating a more immersive and engaging pedagogical environment. It is also noteworthy that the control class, while demonstrating improvement from pre- to post-test (23.96 to 55.92), did not achieve the same level of gains as the experimental class, despite receiving equivalent instructional time. This differential outcome suggests that it is the instructional method, not merely time-on-task or subject maturation, that drives comprehension gains—a conclusion reinforced by the N-Gain analysis controlling for baseline differences. The control class's post-test distribution remaining heavily concentrated in the Poor category (48%) further underscores the ceiling effects of conventional, textbook-centered instruction in EFL reading without interactive media support.

Student Perceptions of Word Card Media Using Kahoot!

Students' perceptions of the learning experience with Word Card Media using Kahoot! were overwhelmingly positive, as reflected in the questionnaire data analyzed across the two indicators of understanding and evaluation. The average rating scale of 66.8 falls within the positive criteria, and individual item analysis reveals consistent endorsement of the media's educational value.

Regarding the Understanding indicator, the 90% strong agreement rate on Item 1 (the media helps understand text more easily) is theoretically significant. It suggests that the multimodal nature of Kahoot! combining colorful visual displays, answer-choice images, and timed competition creates a rich semiotic environment that supports comprehension beyond what linear text alone provides. This is consistent with Cognitive Theory of Multimedia Learning, which posits that presenting information through both verbal and pictorial channels reduces cognitive overload and enhances encoding (Mayer, 2024). While this theory was not part of the initial study design, it serves as a tentative interpretive lens that helps explain the retrospective mechanism by which word cards embedded in the Kahoot! interface potentially eased the students' cognitive processing and facilitated text understanding.

Item 4's findings that 100% of students agreed or strongly agreed that Kahoot! increased their confidence in group discussions highlight an affective dimension of learning often overlooked in purely cognitive assessments. Collaborative discussion is a high-order comprehension skill that requires not only textual understanding but also sufficient metalinguistic confidence to articulate and defend interpretations. This phenomenon is consistent with the view that Integrate structured collaborative activities into curricula to systematically enhance both communication and reasoning skills (Kausar, 2025). The interactive nature of such tools creates an engaging environment that boosts student motivation and involvement, which are essential precursors to meaningful classroom dialogue. Furthermore, providing a platform that fosters independence and confidence in recognizing symbols or concepts enables students to engage more courageously in collaborative tasks.

The negative items in the Understanding indicator yielded results that are equally revealing. The 80% disagreement rate on Item 8 (the media makes students feel like they are merely playing) and Item 9 (the media is less fun due to difficulty and time constraints) collectively refute two common criticisms of gamification in educational contexts: that game-based learning lacks substantive academic value, and that technical or temporal constraints diminish the user experience. In this study, students demonstrated awareness of the dual function of the activity as both a game and a learning tool suggesting successful internalization of the pedagogical purpose of the intervention. This is consistent This is consistent with Sökmen et al., (2024) who argue that the integration of digital technology in primary education, when designed with clear pedagogical goals, significantly improves student participation and attitudes toward the course without compromising academic rigor. Their research suggests that students can distinguish between mere entertainment and technology-mediated learning, viewing the latter as a motivator for deeper involvement in classroom activities.

For the Evaluation indicator, the unanimous agreement on Item 3 (100% agree or strongly agree) that the media improved reading comprehension is particularly significant because it represents students' own metacognitive assessment of their learning a self-regulated reflection on competence growth. This is in line with Suryana et al., (2022) who emphasize that in a constructivist learning framework, students' self-assessment of their competence is a vital component of the learning process, as it allows them to internalize knowledge and recognize their own progress through active engagement with instructional media. The 90% agreement on quiz satisfaction (Item 5) further supports this interpretation: when assessment results are

perceived as fair and reflective of genuine understanding, students develop positive orientations toward testing as a measure of learning rather than as an anxiety-inducing evaluation. As noted by Sayenti & Wiarta (2024), such media-driven success fosters a sense of learning independence; as students see tangible evidence of their ability to master concepts (such as recognizing symbols or comprehending texts), their satisfaction with the evaluation process increases, reinforcing a cycle of positive academic self-perception.

The strong rejection of Items 6, 7, and 10 negative statements about Kahoot!'s impact on test-taking ability, response speed, and information retention provides convergent evidence that students experienced tangible academic benefits from the intervention. Notably, the 90% rejection of Item 10 (the media does not help students remember information better) directly addresses a theoretical concern in gamified learning literature: whether the entertainment value of gamified platforms might impair long-term retention through distraction. The data suggest the opposite that the interactive and repetitive nature of the quiz-based intervention served to solidify memory traces rather than fragment them. This is consistent with Ruswanti et al., (2025) who found that flashcard-based media, especially when integrated with interactive elements, significantly enhances children's interest and ability to recall information by creating a more engaging and memorable learning experience.

Taken together, the perception data indicate that Word Card Media using Kahoot! successfully achieved affective, cognitive, and metacognitive learning outcomes simultaneously—a multi-dimensional impact that exceeds the scope of conventional reading instruction. Students not only improved measurably but also reported awareness of their improvement, enthusiasm for continued engagement with the media, and confidence in applying their reading skills in collaborative and individual assessment contexts. These findings strongly support the recommendation that this integrated media approach be adopted as a regular component of EFL reading instruction at the junior secondary level, and that its implementation be extended across subject areas where vocabulary comprehension is a primary barrier to academic achievement.

CONCLUSIONS

This study examined the effectiveness of word card media integrated with Kahoot! in improving the English reading comprehension of Class VII students at SMPN 4 Majene, and explored students' perceptions of the implementation. Two conclusions are drawn from the findings. First, word card media using Kahoot! is effective in improving students' reading comprehension. The experimental class post-test mean (73.72) substantially exceeded the pre-test mean (31.92), representing an average gain of 41.80 points. The N-Gain mean of 61.41 for the experimental class (vs. 41.90 for the control class) further substantiates the treatment's efficacy. Statistical analysis confirmed this with an independent samples t-test result of Sig.(2-tailed) = 0.00 < 0.05, supporting acceptance of H1. Second, the high-achieving subsample of students demonstrated positive perceptions toward the implementation, with an overall rating scale of 66.8 (Positive category). Future research should include a wider, randomized sample to confirm whether these positive perceptions are shared across all achievement levels, with an overall rating scale of 66.8 (Positive category). Students strongly agreed that the media facilitated text comprehension, stimulated group discussion and peer interaction, and enhanced confidence during learning activities. They also expressed interest in continuing to use the media in other reading classes. The two perception indicators—Understanding and Evaluation—both reflected favorable responses. In summary, the integration of word card media with Kahoot! not only improved reading comprehension scores but also created an interactive, motivating, and enjoyable learning atmosphere. Teachers are advised to continue using interactive digital media alongside vocabulary-building tools. Future researchers are encouraged to compare the effectiveness of word card media across different platforms (e.g., Quizizz, Mentimeter) and to conduct longitudinal studies with larger samples to assess sustained learning gains.

Despite the positive outcomes, several limitations of this study should be acknowledged. First, the sample size was relatively small, consisting of only two intact classes ($N = 50$), which may limit the statistical power of the findings. Second, because the study was conducted within a single-site context at one specific school, the generalizability of the results to other demographic areas or school types remains constrained. Finally, the administration of the perception questionnaire was restricted to a non-random, purposive subsample of the 10 highest-scoring students. While this offered valuable insights into how high-achievers engaged with the game-based tool, these positive perceptions cannot be generalized to reflect the attitudes of mid- or low-performing students across the entire class. Future research should involve a larger, multi-site sample and incorporate randomized feedback across all achievement levels to validate these findings further.

REFERENCES

Akubuilo, F., Okorie, E. U., Onwuka, G., & Uloh-Bethels, A. C. (2015). Reading Readiness Deficiency in Children: Causes and Ways of Improvement. *Journal of Education and Practice*, *6*(24), 38–43.

Amrang & Hustiana. (2025). Exploration of English Learning Practices with Edtech and Local Culture among Mandar Youth. *Journal of English Teaching, Applied Linguistic and Literatures (JETALL)*, *8*(3), 184–203. https://doi.org/http://dx.doi.org/10.20527/jetall.v8i3.23771

Asdar, Nugroho, D. A., & Hustiana. (2024). Subsistence of English Area Program in Enhancing Teenagers' English Skill in Majene Regency. *ELS Journal on Interdisciplinary Studies in Humanities*, *7*(3), 462–474. https://doi.org/https://doi.org/10.34050/elsjish.v7i3.37239

Bohang, M. B. A., Khartha, A., Alfian, H., Marhamah, M., Reskiawan, B., Hustiana, H., & Mustari, S. H. (2025). Contextual Teaching And Learning (Ctl) In Offline Settings: Enhancing Business English Fluency For Women Entrepreneurs Through Real-World Scenarios. *Klasikal : Journal Of Education, Language Teaching And Science*, *7*(1), 303–315. https://doi.org/10.52208/klasikal.v7i1.1289

Fitriyani, N., Rintayanti, P., & Salimi, M. (2025). Development of Flashcard Media Based on Augmented Reality (AR) on Solar System Material for Grade VI Elementary School. *Social, Humanities, and Educational Studies*, *8*(4), 456–468.

Hustiana, Khatimah, N. H., & Nugroho, D. A. (2025). *Pengembangan Kompetensi Profesional Guru SMPN 6 Majene dalam Penggunaan Canva for Education untuk Media Pembelajaran Interaktif*. *3*(2).

Hustiana, Nugroho, D. A., Asdar, Hasanuddin, N., Junaedi, A., & Fajariani. (2025). Prospective Teachers' perception of English Area Training: Enhancing 21st-Century Competencies. *Journal of English Teaching, Applied Linguistic and Literatures (JETALL)*, *8*(3), 129–141. https://doi.org/10.20527/jetall.v8i3.22284

Isma, A., Basri, M., Abduh, A., Putri, A. M. J., & Hustiana, H. (2024). Empowering E-Learning for English Literacy Development: Insights from Lecturers. *JETAL: Journal of English Teaching & Applied Linguistic*, *5*(2), 146–153. https://doi.org/10.36655/jetal.v5i2.1495

Kausar, D. F. N. (2025). Effect of Collaborative Learning on Students' Communication Skills and Reasoning Skills. *Social Science Review Archives*, *3*(3), 2228–2244. https://doi.org/10.70670/sra.v3i3.1065

Korkmaz, S. (2021). Using Kahoot to Improve Reading Comprehension of English as A Foreign Language Learners. *International Online Journal of Education and Teaching (IOJET)*, *8*(2), 1138-1150.

Marsa, S. S., Kuspiyah, H. R., & Agustina, E. (2021). The Effect of Kahoot! Game in Teaching Reading Comprehension Achievement. *JET (Journal of English Teaching)*, *7*(2), 133–149. https://doi.org/10.33541/jet.v7i2.2738

Mayer, R. E. (2024). The Past, Present, and Future of the Cognitive Theory of Multimedia Learning. *Educational Psychology Review*, *36*(1), 8. https://doi.org/10.1007/s10648-023-09842-1

Nugroho, D. S. (2021). Using Kahoot! Improving seventh-graders' reading comprehension skills of SMPN 2 Tegalrejo. *Journal of English Language and Pedagogy*, *4*(1), 89–95. https://doi.org/10.36597/jelp.v4i1.10997

Rochimah, H., & Muslim, S. (2021). Students' Perceptions in Using the Kahoot! Game on Reading Comprehension Learning. *AL-ISHLAH: Jurnal Pendidikan*, *13*(3), 2213–2222. https://doi.org/10.35445/alishlah.v13i3.1115

Ruswanti, T., Jannah, M., Fitri, R., Kristanto, A., Dewi, U., & Lasarus, Y. M. (2025). Effect of Augmented Reality Flash Card Media on Reading Interest and Storytelling Ability in Children Aged 5-6 Years. *International Journal of Emerging Research and Review*, *3*(2), 000096. https://doi.org/10.56707/ijoerar.v3i2.96

Sayenti, N. N. W. R., & Wiarta, I. W. (2024). The Effectiveness of Flashcard Media in Improving Early Reading Skills in Early Childhood Group B. *Jurnal Pendidikan Anak Usia Dini Undiksha*, *12*(3), 446–454. https://doi.org/10.23887/paud.v12i3.80270

Setiawan, M. F. (2020). The Effectiveness Of Using Kahoot! As A Media To Improve Students' Reading Comprehension In Narrative Text. *RETAIN*, *08*, 115–121.

Sökmen, Y., Sarikaya, İ., & Nalçacı, A. (2024). The Effect of Augmented Reality Technology on Primary

School Students' Achievement, Attitudes Towards the Course, Attitudes Towards Technology, and Participation in Classroom Activities. *International Journal of Human–Computer Interaction*, *40*(15), 3936–3951. https://doi.org/10.1080/10447318.2023.2204270

Suryana, E., Aprina, M. P., & Harto, K. (2022). Teori Konstruktivistik dan Implikasinya dalam Pembelajaran. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, *5*(7), 2070–2080. https://doi.org/10.54371/jiip.v5i7.666

Wibisono, D. (2019). The Effects Of Kahoot! In Teaching Reading To Tenth Grade Students. *Magister Scientiae*, (45), 86–105.

Wiropati, Y., Karsidi, R., & Gunarhadi. (2017). *The Improvement Of Read Aloud Ability By Using Word Card Media Of Second Grade Students In Sdn 1 Pajang No. 93 Surakarta, Indonesia Academic Year 2016/2017*. https://doi.org/10.5281/ZENODO.234673