

BOOSTING EFL STUDENTS' READING ABILITY THROUGH KAHOOT! IN HORTATORY TEXT INSTRUCTION

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Abstract

This research examined the effect of Kahoot! on the reading achievement of eleventh-grade EFL students at SMAN 3 Tegal. To accomplish the research objective, a quantitative method employing a true experimental approach was employed. This research involved a population of 356 eleventh-grade students enrolled in the 2025/2026 academic year, from which 70 participants were selected and allocated to either the intervention group or the comparison group. Data collection was carried out using a multiple-choice reading test administered before and after the instructional treatment. The resulting data were processed with SPSS version 26 through normality and homogeneity testing, followed by independent-samples and paired-samples t-tests to evaluate the research hypothesis. The analysis demonstrated that students who learned through Kahoot! Experienced a statistically significant improvement in their reading achievement. Both the independent-samples and paired-samples t-test generated significance values of 0.000, which were below the predetermined threshold of 0.05. These findings confirm that incorporating Kahoot! into classroom instruction positively influenced students' reading achievement and that the intervention group demonstrated substantially superior outcomes compared with the comparison group receiving conventional instruction. Therefore, Kahoot! may be considered an effective digital learning platform for supporting reading instruction in EFL classrooms.

Keywords: Kahoot!; reading ability; EFL students; hortatory text; reading instruction;

1. INTRODUCTION

Reading plays a fundamental role in EFL learning since it allows learners to acquire information, comprehend written communication, and interpret meaning from various texts. Successful reading comprehension involves constructing meaning by linking textual information with learners' background knowledge and language competence. Consequently, students are expected to master several reading skills, such as recognizing central ideas, recognizing relevant details, understanding word meanings through contextual clues, and drawing logical conclusions. from written materials [1], [2].

Within the Indonesian EFL setting, many students continue to encounter obstacles in reading comprehension. These difficulties are often associated with restricted vocabulary knowledge, unfamiliar grammatical patterns, and challenges in recognizing essential information presented in a text. Such problems become even more demanding when learners are required to read hortatory texts, as they must understand the issue being discussed, analyze the writer's arguments, and determine the recommendations or suggestions provided. For this reason, reading instruction should encourage learners to engage actively with texts while continuously monitoring and evaluating their own understanding throughout the learning process [3], [4].

The rapid advancement of digital technology has expanded opportunities to improve English language teaching practices. Among the digital platforms available for classroom implementation, Kahoot! Has gained considerable attention as an interactive learning application. This platform enables teachers to design quiz-based learning activities in which students answer questions using digital devices. Its interactive features, including instant feedback, time restrictions, and game-based elements, have the potential to increase students' participation and engagement during classroom instruction [5], [6].

The integration of Kahoot! is particularly suitable for reading instruction because students are required to read texts carefully, interpret the information presented, and respond to comprehension questions. The prompt feedback delivered following every answer allows students to recognize their mistakes and reflect on their understanding of the text. This learning process aligns with the concepts of constructivist learning framework, which emphasizes that knowledge is developed through learners'

active participation, interaction with learning materials, and reflective thinking during instructional activities [7].

The importance of improving reading ability was identified among eleventh-grade students at SMAN 3 Tegal. Several students experienced difficulties in determining central ideas, recognizing relevant details, and comprehending word meanings through contextual clues, and interpreting implied information contained in reading passages. In addition, existing reading activities offered limited chances for participants to participate actively throughout the learning. Accordingly, this research explored whether incorporating Kahoot! Into reading instruction could improve the reading ability of eleventh-grade EFL students, particularly in comprehending hortatory texts.

Accordingly, this research was conducted to investigate the effect of integrating Kahoot! Into reading instruction on students' reading ability and to assess whether a statistically significant variation was present between learners who received Kahoot!-supported instruction and those who learned through conventional classroom instruction without the application.

Earlier studies have explored the implementation of Kahoot! In relation to student engagement and technology-enhanced learning environments. Nevertheless, empirical evidence focusing specifically on its efficacy in enhancing EFL learners' reading ability through a true experimental design is still relatively limited. Therefore, this study contributes additional empirical findings regarding the implementation of Kahoot! In reading instruction, particularly in supporting students' comprehension of hortatory texts.

2. METHODOLOGY

This research utilized a quantitative method through a true experimental pretest–posttest control group design. The population consisted of 356 eleventh-grade students at SMAN 3 Tegal during the 2025/2026 academic period. The research sample consisted of 70 students selected through cluster random sampling, with 35 learners assigned to the intervention group and 35 learners assigned to the comparison group. The independent variable was the integration of Kahoot!, while the dependent variable was students' reading ability measured through reading test scores.

The research tool took the form of a multiple-choice reading test designed to measure students' ability to understand hortatory texts. The test assessed several reading aspects, encompassing the recognition of central ideas, understanding relevant information, comprehending word meanings through contextual clues, and drawing logical conclusions. The instrument was tested before the main data gathering to establish its accuracy and consistency.

The data gathering procedure consisted of a pre-test, treatment, and post-test. Both groups completed the pre-test to identify their baseline reading ability. The intervention group participated in reading instruction integrated with Kahoot! Through six instructional meetings, while the control group received reading instruction without the application. Subsequently the treatment, both groups completed the post-test. The collected data were analysed using SPSS version 26. tests of normal distribution and variance homogeneity were conducted before hypothesis testing. Differences between the intervention group's pretest and posttest performance were analyzed using a paired-sample t-test. In contrast, posttest performance across the two study groups was evaluated through an independent-sample t-test. Statistical significance was determined using an alpha criterion of 0.05.

The data analysis was carried out after the prerequisite assumptions had been examined. The findings from the assessments of data normality and variance equality demonstrated that the collected data satisfied the assumptions required for parametric statistical procedures. Consequently, paired-sample and independent-sample t-test analyses were employed to evaluate the proposed research hypotheses.

Table 1. Result of Homogeneity Test

Class		Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Result	Pre-test	.145	35	.064	.958	35	.196
	Control						
	Post-test	.134	35	.110	.963	35	.279
	Control						
	Pre-test	.128	35	.153	.961	35	.242
	Experimen tal						

	Post-test Experimen tal	.140	35	.080	.956	35	.175
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The experimental group received reading instruction supported by Kahoot! through activities designed to practice comprehension of hortatory texts. The control group received the same general reading focus without the Kahoot! application.

The statistical analyses were interpreted using statistical significance was determined using an alpha threshold of 0.05. A p-value below this threshold resulted in the rejection of the null hypothesis, indicating that a statistically significant difference or effect was present.

Table 1. Result of Homogeneity Test

		Levene Statistic	df1	df2	Sig.
Result	Based on Mean	2.498	1	68	.119
	Based on Median	2.336	1	68	.131
	Based on Median and with adjusted df	2.336	1	66.678	.131
	Based on trimmed mean	2.532	1	68	.116

3. RESULTS

The results of this study present the analysis from the dataset obtained from the intervention and comparison groups. The analysis included prerequisite tests and hypothesis testing to determine whether integrating Kahoot! into reading instruction contributed to students' reading ability.

3.1 Paired Sample t-Test

The paired-sample t-test analysis was performed to assess whether a statistically significant difference existed between the pre-test and post-test scores of the experimental group. The statistical analysis revealed a p-value of 0.000, which fell below the predetermined threshold of 0.05. Consequently, the null hypothesis (H_0) was rejected. These findings suggest that the intervention group experienced a statistically significant improvement in reading ability after the implementation of Kahoot!.

The improvement may be related to the learning activities provided through Kahoot!. Students were encouraged to read texts carefully and respond to comprehension questions. Immediate feedback enabled them to identify incorrect answers and reconsider their understanding. In this way, Kahoot! supported students' active involvement in the reading process and provided opportunities to evaluate their comprehension.

The finding suggests that integrating a digital quiz platform into reading activities can provide students with additional opportunities to engage with comprehension questions. Rather than being used only for assessment, Kahoot! was integrated into the learning process to encourage participation and provide immediate feedback.

Table 3. Independent Sample t-Test

		Mean	Std. Deviation	Std. Error Mean
Pair 1	Post-test (after treatment)	83.00	8.16	1.38
	Pre-test (before treatment)	59.91	10.02	1.69

An independent-samples t-test was performed to determine whether the post-test achievement of the experimental group differed from that of the control group. The statistical analysis revealed a p-value of 0.000, which fell below the established significance threshold of 0.05. Consequently, the null hypothesis (H_0) was not supported, demonstrating the presence of a statistically significant difference between the reading performance of the two groups. The superior posttest results recorded by the intervention group

indicated that students who learned through Kahoot!-assisted activities demonstrated stronger reading performance than those who received conventional classroom instruction.

The findings further suggest that the integration of Kahoot! enhanced students' reading achievement by creating a more interactive learning environment. During the instructional sessions, students were encouraged to participate actively in reading tasks while receiving immediate feedback on their responses. This feature allowed learners to recognize incorrect answers, reconsider their understanding of the texts, and refine their comprehension strategies. As a result, Kahoot! Functioned as an effective instructional medium that supported students in developing stronger reading comprehension skills.

The present research further contributes to the expanding body of scholarly literature concerning technology-supported English language education, particularly in the area of reading comprehension. By employing a true experimental design and focusing on hortatory texts, the research provides additional empirical evidence regarding the educational value of Kahoot! In EFL classrooms. The results indicate that the platform can be used as a complementary digital learning resource when its activities are carefully aligned with instructional objectives and the reading skills targeted in the lesson.

3.2 Independent Sample t-Test

Table 3.2 Result of Independent t-Test

Result	Equal variances assumed	Mean		t-test for Equality of Means					Interval of the	
		2.498	.119	2.197	68	.032	6.81	3.10	0.62	13.00
	Equal variances not assumed			2.197	64.121	.032	6.81	3.10	0.61	13.01

4. CONCLUSIONS

The findings of the present research suggest that the integration of Kahoot! Into reading lessons had a beneficial effect on reading proficiency of Grade 11 EFL learners enrolled in SMAN 3 Tegal. A paired-sample t-test analysis indicated a statistically significant improvement in the intervention group's scores after the treatment, whereas an independent-sample t-test analysis demonstrated a statistically significant difference in posttest performance across the intervention and comparison groups. These outcomes indicate that Kahoot! Is a valuable digital learning platform that can be incorporated into reading instruction to promote student engagement and provide timely feedback during the learning process. Further studies are recommended to examine its implementation with different text genres, language competencies, student populations, or alternative research methodologies.

5. ACKNOWLEDGEMENTS

The researcher gratefully acknowledges the invaluable guidance and support provided by the supervisors throughout this study. Sincere appreciation is also extended to the principal, the English teacher, and the students of SMAN 3 Tegal for their cooperation and participation during the research. In addition, the researcher would like to thank family and friends for their continuous encouragement and unwavering support during the completion of this research.

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