

THE EFFECT OF QUIZIZZ ON 11 GRADE STUDENTS' READING COMPREHENSION IN SMKN 1 KOTA KEDIRI ACADEMIC 2025-2026

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ABSTRACT

The purpose of this study was to evaluate the effectiveness of using the Quizizz application in improving the reading comprehension skills of grade XI students at SMK 1 Kota Kediri in English lessons. This study used a descriptive quantitative design with one pre-test and post-test group. A total of 33 grade 11 vocational school students participated in this study during reading comprehension lessons. The data were analysed using SPSS 25. The results showed that the average pre-test score was 72.44 and the average post-test score was 87.48. The results showed a t-test value of -5.854 and a degree of freedom (df) of 32. The conclusion of this study is that the Quizizz learning media can help students significantly improve their reading comprehension. This study is expected to contribute to interactive and attractive learning for both students and teachers.

Keyword: *mobile learning, reading comprehension, Quizizz*

INTRODUCTION

In recent decades, the world of education has undergone a massive transformation due to the development of digital technology. Digitalisation has changed the way teachers teach and students learn. Conventional learning methods dominated by face-to-face interaction and lectures are being replaced by information and communication technology (ICT)-based learning models.

Interactive platforms such as Google Classroom, Kahoot!, Edmodo, and Quizizz have become popular tools that facilitate collaborative and project-based learning. According to Traxler (2018), m-learning provides high flexibility, improves access to education, and supports informal and independent learning, especially in developing countries.

In Indonesia, based on Permendikbud No. 23 of 2015 concerning Character Building, reading skills are included as part of the school literacy movement (GLS) which aims to improve students' reading culture and functional literacy. Various studies show that students often feel uninterested or unenthusiastic about reading activities in class. This is due to the low relevance of reading materials to their real world, exam pressure that makes reading merely an obligation, and a lack of interest- or hobby-based approaches. A study by Ahmad & Aziz (2019) found that high school students in Malaysia showed low levels of motivation to read English, especially if the text was not contextual or relevant to their world. Meanwhile, Al-Mahrooqi & Denman (2016) emphasised that low engagement in reading classes is often caused by passive methods that only focus on answering practice questions, without interactive activities. A study by Ng (2015) shows that digital natives tend to be more responsive to interactive and technology-based learning materials. Khoiriyah (2015) found that students were not interested in reading textbooks in their field of study even though they considered the textbooks useful. Khoiriya et al. (2021) suggested that the reasons behind students' lack of interest were their lack of basic knowledge and limited background to understand the content and structure of the reading material.

Many teachers still use traditional approaches such as reading together in class, translating texts, or answering literal questions, which do little to motivate students to think critically or reflectively. This approach is one-sided and does not accommodate the learning style preferences of students in the digital age. Yulianti, Sulistyono, & Widiati (2021) note that traditional methods make students passive and only pursue grades, not true understanding. Huang (2018) emphasises the importance of creating digital interaction-based learning so that students are more active and emotionally and cognitively engaged in reading.

According to Qian & Clark (2016), GBL has been proven to improve learning outcomes because it provides an immersive and challenging learning experience, especially in the context of foreign language learning. Furthermore, Koivisto & Hamari (2019) found that gamification

elements such as leaderboards, badges, and point systems can increase student engagement and retention in digital learning activities. Quizizz is an educational quiz-based application that combines game elements and mobile learning. According to Sari & Wahyudin (2020), Quizizz helps increase student participation in online learning and improves their performance, especially in English reading and vocabulary skills. In another study, Zainuddin et al. (2020) stated that Quizizz is effective in collaborative learning and can significantly increase student motivation because it provides a competitive and fun atmosphere.

Quizizz is a game-based learning platform that supports various types of questions, including reading comprehension questions. Teachers can insert narrative, expository, or descriptive texts and add multiple-choice, true-false, and fill-in-the-blank questions, so that it can be used to practise literal, inferential, and evaluative reading skills. Research by Astuti & Nurweni (2021) shows that Quizizz is effective for developing reading comprehension exercises based on texts tailored to students' ability levels, especially in secondary schools. This study found that the use of reading texts in Quizizz not only improves literal comprehension but also the ability to draw conclusions and understand implied meanings.

Several previous studies have examined the effects of using Quizizz on improving students' reading skills. A study by Daniati & Amri (2025) showed that the Paper Quizizz mode significantly improved the reading comprehension skills of EFL students through written text-based learning. Furthermore, Wibowo, Ulfaika & Faridy (2025) examined the effectiveness of Quizizz in developing critical reading skills among veterinary students, showing that 86% of respondents felt that Quizizz improved their ability to understand critical texts. Research by Torres et al. (2025) focused on increasing motivation and English vocabulary through Quizizz in online classes, while Chulerk et al. (2025) evaluated the use of Quizizz in the Mobile Assisted Language Learning (MALL) framework to achieve the CEFR B1 standard. Another study by Sulistyanto & Prayoga (2025) revealed that Quizizz is effective in facilitating engagement and improving reading comprehension through multiple quiz attempts. In general, these studies prove that Quizizz is effective in improving English learning outcomes, including in the aspects of literal reading and vocabulary.

Most studies have been conducted in senior high schools. This has led to a clear discrepancy, known as the research gap, in that there has been no quantitative research specifically evaluating the effect of using Quizizz on the literal, inferential, and evaluative reading skills of vocational high school students in the context of English language learning supported by a mobile learning model. The answer to this research can be found through the integration of the Quizizz automatic assessment model with question classification based on reading taxonomy, enabling direct measurement of reading comprehension sub-competencies, not just final scores.

The main focus of this study is to evaluate the effect of using the Quizizz application in teaching reading comprehension skills to Year 11 students at vocational secondary schools (SMK). This study uses Quizizz as a game-based digital learning medium that is tested in the context of English language learning. Quizizz was chosen because this platform has been proven to increase student motivation and engagement in reading, supports text-based learning with real-time feedback, and can be integrated into mobile or blended learning models.

The novelty of this study lies in the integration of Quizizz as a text-based diagnostic evaluation tool developed in stages (literal–inferential–evaluative), as well as its implementation in the context of vocational high school students, who have not been the focus of empirical studies. This research also contributes new insights into the use of Quizizz not only as a tool for entertainment or daily quizzes, but as a reflective and evaluative learning medium that supports mobile and contextual learning in the digital age.

The main objective of this study is to evaluate the effectiveness of using the Quizizz application in improving the reading comprehension skills of Grade XI vocational school students in English lessons. This study seeks to improve the learning process to be of higher quality and in line with the challenges of 21st-century education, particularly in digital literacy learning. Significantly, the results of this study are expected to provide teachers with a deeper understanding of effective digital media usage strategies and encourage the development of relevant, interactive, and data-based reading assessment models in the context of vocational schools.

METHODOLOGY

This study uses a quantitative approach, which aims to objectively measure the extent of Quizizz's influence on students' reading abilities. This approach involves the use of pre-tests and post-tests to compare reading abilities before and after treatment, descriptive and inferential statistical analyses, namely t-tests or ANOVA, to determine the significance of the influence of Quizizz, and drawing conclusions based on empirical data, not just qualitative observations. According to Creswell & Creswell (2018), the quantitative approach is very suitable for measuring statistically testable cause-and-effect relationships in the context of education. Local support also comes from Rukmini & Drajati (2020), who emphasise that the quantitative experimental model is very relevant for use in research evaluating technology-based learning media.

In this study, there are two main variables analysed: reading comprehension for students as the dependent variable, and the use of Quizizz in this learning process as the independent variable. By developing reading comprehension skills, individuals can become more effective and critical readers, which in turn will improve their ability to communicate and interact with the world around them (Sari, 2020). Quizizz also supports a game mode, where students can compete with each other in real time, which can increase their motivation and engagement in learning (Khan et al., 2021).

The research instrument used was a questionnaire. A questionnaire is a data collection tool used to measure certain variables in this study, namely students' reading comprehension. This questionnaire was designed to collect information about students' experiences in using Quizizz as a learning tool, as well as their perceptions of its effectiveness in improving reading comprehension. The questionnaire may include open-ended and closed-ended questions related to the use of Quizizz, learning motivation, and reading comprehension levels.

This research was conducted at SMKN 1 Kota Kediri, one of the vocational secondary schools in the Kediri City area. This location was chosen because it has a large and diverse population of Year 11 students, as well as facilities that support the use of technology in learning, such as access to computers and the internet. This research is planned to be conducted over one semester, with a schedule adjusted to the academic calendar of SMKN 1 Kota Kediri. The research

will begin in August and end in October, allowing sufficient time for data collection and analysis of the results.

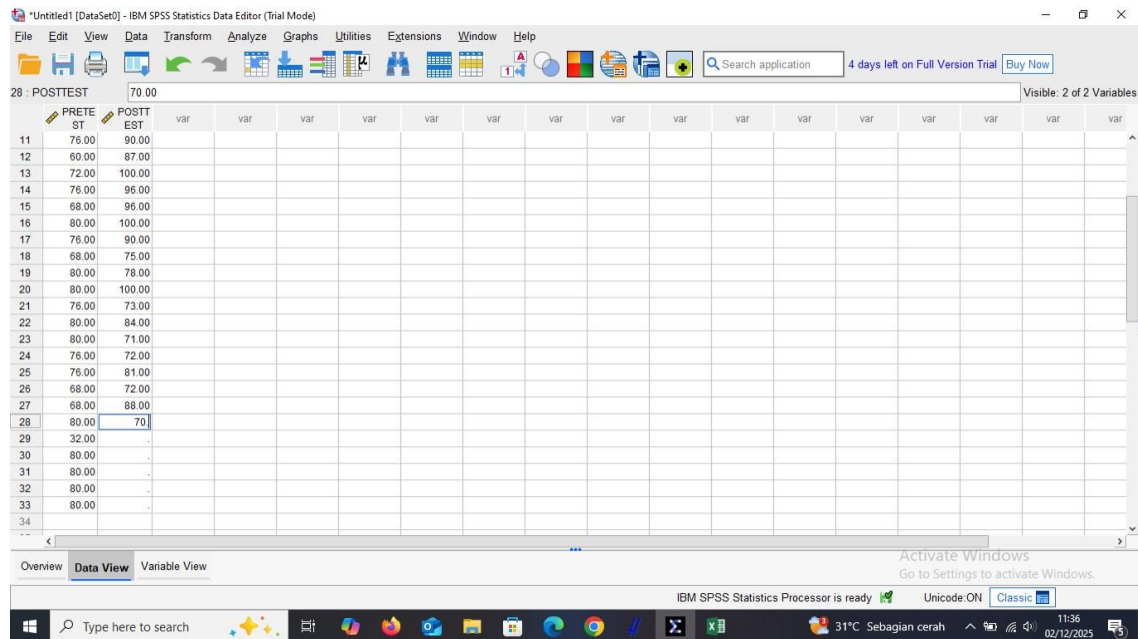
The population in this study is 11th grade students at SMKN 1 Kota Kediri. Year 11 students were chosen as the population because they are at an important stage of academic development, where reading and text comprehension skills are essential to support learning. The sampling technique used is purposive sampling. Number of Samples Taken: The number of samples taken in this study is planned to be 30 students from Year 11.

Data Collection Methods Used: The data collection methods used in this study are Written Tests: Pre-tests and post-tests will be used as the main methods for collecting data on students' reading comprehension. These tests will include multiple-choice questions, short-answer questions, and essay questions designed to evaluate various aspects of reading comprehension.

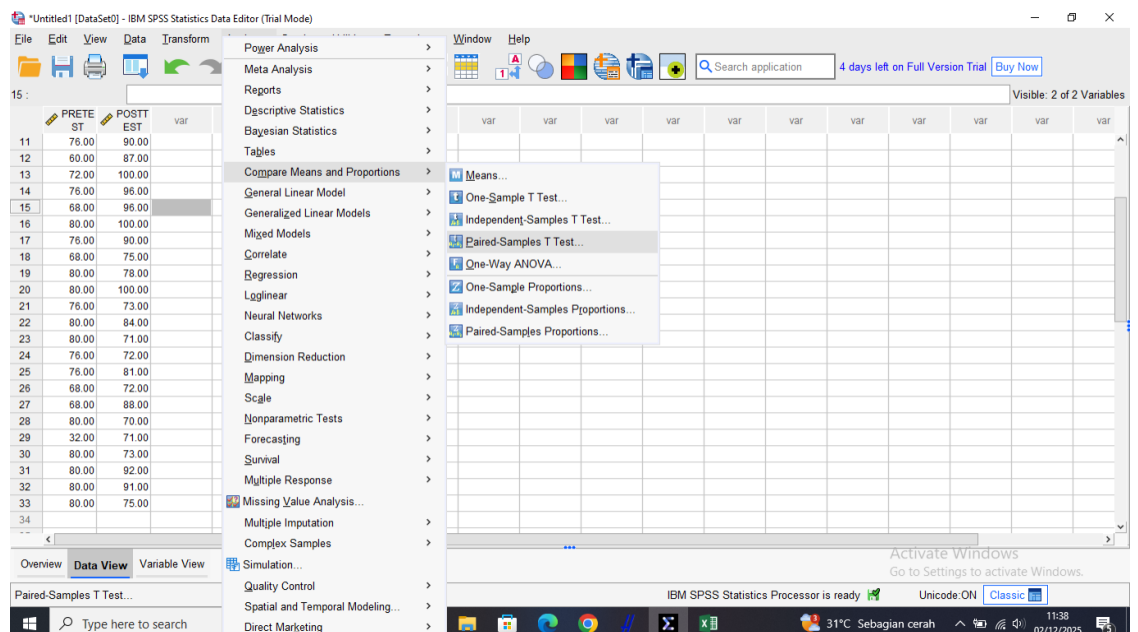
To analyse changes in students' reading comprehension before and after using Quizizz, the researcher will use a t-test. This t-test will be used to compare the average pre-test and post-test scores of students. By using the t-test, the researcher can determine whether there is a statistically significant difference between the two groups of scores. The t-test used in this study is a paired t-test, because the data being compared comes from the same group (the same students) at two different times (before and after the intervention).

Data analysis will be conducted using SPSS (Statistical Package for the Social Sciences) statistical software. In this study, SPSS will be used to:

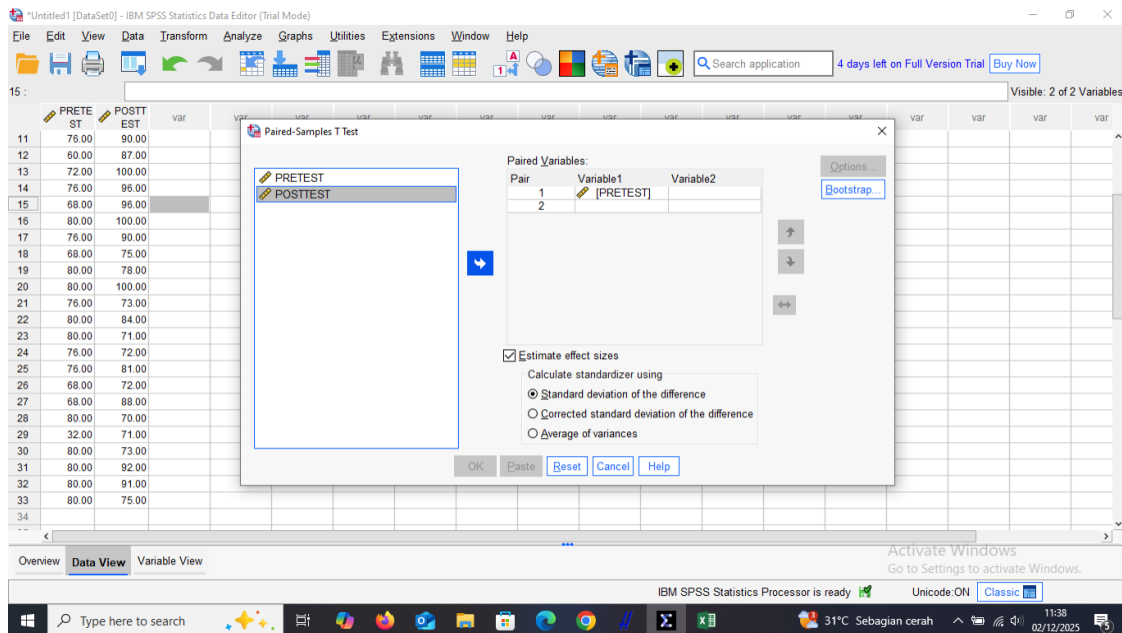
1. Input pre-test and post-test data.



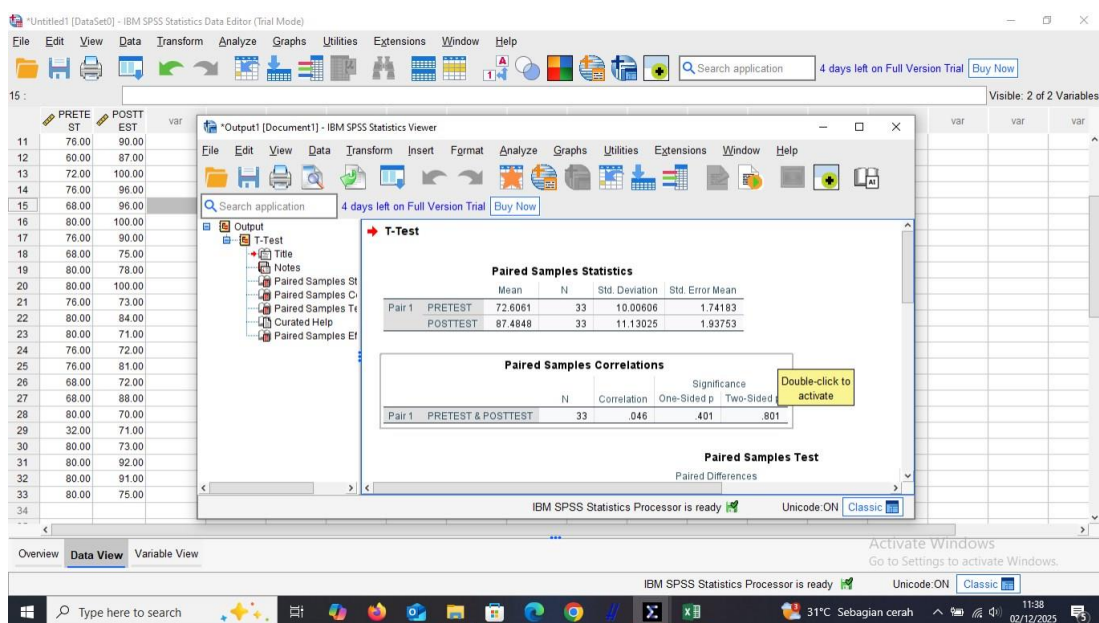
2. Conduct descriptive analysis to obtain basic statistics from demographic data and test scores.



3. Perform a t-test to compare the pre-test and post-test results.



4. Generate output showing the p-value (significance) to determine whether the differences found are statistically significant.



The data consists of the average pre-test scores and total scores. These are then compared with the post-test using these steps or the following steps.

$$MPre = \frac{\sum pre}{N}$$

$$MPost = \frac{\sum post}{N}$$

$$\sum X^2 d = \sum d^2 - \frac{(\sum d^2)}{N}$$

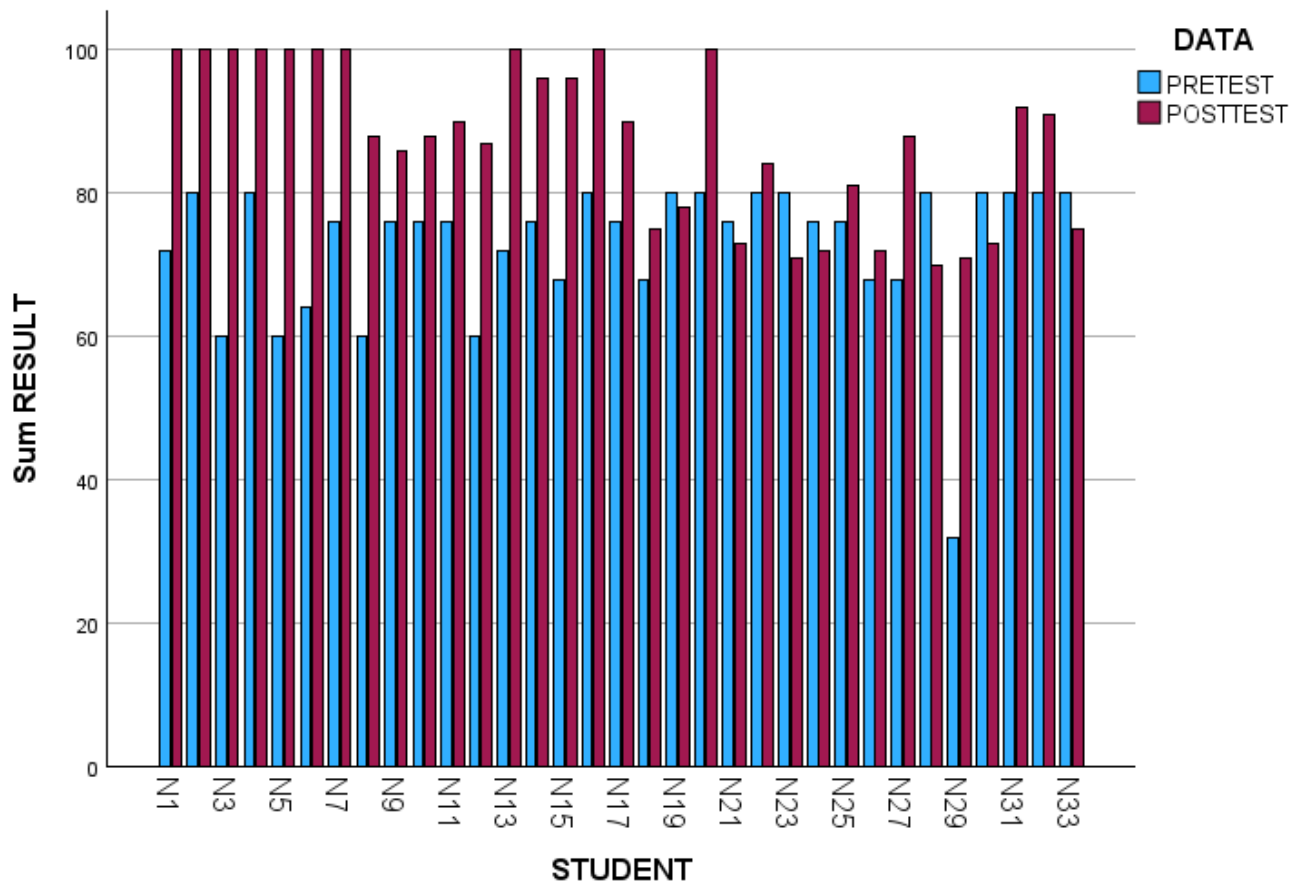
$$D = \frac{\sum D}{N}$$

$$t = \frac{\frac{D}{\sqrt{\sum D^2 - \frac{(\sum D^2)}{N}}}}{N (N - 1)}$$

FINDINGS

Based on the data collected, a total of 33 Year 11 students participated in this study. The data obtained includes each student's pre-test and post-test scores, which have now been identified and are ready for further processing to analyse changes or improvements in learning outcomes after the intervention.

The results are as follows:



This study shows that quizizz learning media can improve the reading comprehension of Year 11 students. Students' reading comprehension skills before being taught using quizizz learning media were still poor because few teachers provided learning using quizizz learning media. These results were supported by the pre-test results conducted by the author before the teacher taught reading comprehension using quizizz. There were 33 students in total, including 25 female students and 8 male students. The pre-test results showed that 12 (80) students scored above the passing grade of 80 and 21 students scored below the passing grade. The highest score in the pre-test was 80, and the lowest score was 32, with an average score of 72.6.

The author then applied the Quizizz learning media to teach reading comprehension by focusing on stories and reading. The total number of students was 33, including 25 female students and 8 male students. The pre-test results showed that 12 students scored above the passing grade

and 21 students scored below the passing grade. The highest score in the pre-test was 80, and the lowest score was 32, with an average score of 72,6.

After being taught using the Quizizz learning media, the students' comprehension improved. This was supported by the results of the post-test conducted by the author after the teacher taught reading comprehension using the Quizizz media. The test results showed that almost all students scored above the passing grade. The highest score obtained was 100, and the lowest score was 70, with an average score of 87,4.

Based on the results of the pre-test and post-test analysed using SPSS, the following results were obtained:

Table 1

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRETEST	72.6061	33	10.00606	1.74183
	POSTTEST	87.4848	33	11.13025	1.93753

Based on the table above, the average pre-test score was 72.44 with a standard deviation of 10.00, and the average post-test score was 87.48 with a standard deviation of 11.13. The number of participants in each test (N) was 33.

Table 2

Paired Samples Correlations

		N	Correlation	Significance	
				One-Sided p	Two-Sided p
Pair 1	PRETEST & POSTTEST	33	.046	.401	.801

Based on the paired sample correlation table above, the output shows that the data before and after treatment is 0.046 with a one-sided significance value of 0.401 and a two-sided significance value of 0.801. This means that there is a relationship between students' listening skills before and after treatment.

Table 3

Paired Samples Test

		Paired Differences							Significance	
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference				One- Sided p	Two- Sided p
					Lower	Upper	t	df		
Pair 1	PRETEST -	-	14.623	2.54570	-	-9.69336	-	32	<.001	<.001
	POSTTEST	14.87879	95		20.06421		5.845			

In the paired sample test table, the average shows the difference between the pre-test and post-test using SPSS 25 with the pre-test minus the post-test. The results show a t-test value of -5.854 and a degree of freedom (df) of 32, with a significance value (two-sided) of less than 0.001. Since this significance value is much smaller than the threshold of 0.5, this means that the difference between the pre-test and post-test is real and not due to chance. This shows that the intervention provided was successful and effective.

DISCUSSION

Previous studies demonstrating the effectiveness of Quizizz have mostly been conducted in senior high schools. This has created a research gap, namely the absence of quantitative studies that specifically evaluate the effect of Quizizz on sub-competencies of reading skills (literal, inferential, and evaluative) in vocational high school students.

This study successfully fills this gap by testing and validating the use of Quizizz in a vocational school setting. This study proves that Quizizz is highly relevant and effective for vocational school students, not only as a recreational tool but also as a multi-level diagnostic evaluation tool that supports contextual learning in the digital age.

Although the populations differ, the main conclusion of this study, which shows a significant increase in reading comprehension, is consistent with various positive findings reported in previous literature. Previous studies (Sari & Wahyudin (2020), Zainuddin et al. (2020)) state that Quizizz helps increase participation and motivation because of its competitive and fun nature. This study reinforces this by interpreting the success of Quizizz through the Game-Based Learning (GBL) theory. Previous studies (Astuti & Nurweni (2021)) found that Quizizz is effective not only for literal comprehension but also for inference skills and implicit meaning comprehension. This study supports this by finding an increase in story comprehension, which involves inferential skills.

This study critically acknowledges the limitations of its design, which consists of a single pre-test post-test group, which cannot completely rule out external variables (such as the natural maturity of students). Therefore, this study recommends future studies to use a pure experimental design with a control group to further isolate the specific effects of Quizizz as an independent variable.

CONCLUSION

The conclusion of this study is that the Quizizz learning media can help students significantly improve their reading comprehension. Reading comprehension through the Quizizz media showed better improvement, especially in reading comprehension of stories. Thus, the Quizizz learning media can facilitate students in learning reading comprehension, both in the form of news stories or simply understanding a sentence.

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