

The Effect of a Maze Game on The Vocabulary Mastery of Ninth Grade Students at SMPN 1 Tegalsari in The Academic Year 2025/2026

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ABSTRACT

Vocabulary is a crucial component in language proficiency that supports students' communication skills. This study was conducted to know the effect of a maze game on the Vocabulary Mastery of Ninth Grade Student at SMPN 1 Tegalsari in the Academic Year 2025/2026. This study used a quasi-experimental design with a one-group pretest-posttest approach. The participants of this study consisted of 33 of ninth C grade students. Data was collected using a vocabulary test consisting of 30 multiple-choice questions items that focused on synonym and antonym in three categories: verbs, nouns, and adjectives. With SPSS version 27, the statistical analysis was carried out. The results showed a significant increase in vocabulary scores, where the mean score of the pre-test was 51 and increased to 79 in the post-test. The paired sample t-test showed a t-value of 23.767, higher than the t-table value of 2.036 with a significance level below 0.05, indicating a statistically significant difference. This study shows that the use of maze game can help students increase their vocabulary mastery. In this study, focusing on word recognition in the categories of verbs, nouns, and adjectives was proven to facilitate students' vocabulary mastery. Therefore, Maze Game has effect on students' vocabulary mastery, especially their understanding in adjectives.

Keywords: Vocabulary; Mastery; Maze Game; Students; Tegalsari

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INTRODUCTION

Language is one of the most essential elements in human life, functioning as a medium of communication that allows individuals to express ideas, thoughts, and feelings. It also plays a significant role in shaping social development, cultural transmission, and identity formation (Siregar, 2023). Without language, effective communication and the exchange of information would be difficult to achieve.

In addition, language enables people to understand cultural realities, preserve traditions, and build meaningful connections across communities. Among the many languages used worldwide, English stands out as the most widely spoken international language, serving as a global lingua franca in education, technology, business, and social interaction. In Indonesia, English is taught as a compulsory subject from elementary to secondary education levels. The main objective of teaching English in schools is to equip students with adequate communication skills, both spoken and written.

To achieve this goal, mastery of essential linguistic components such as grammar, pronunciation, and vocabulary is crucial. Among these, vocabulary mastery is regarded as the foundation of language skills, as it supports students in listening, speaking, reading, and writing activities. Without sufficient vocabulary, students will face difficulties in understanding texts, expressing ideas, and engaging in effective communication. Thus, vocabulary becomes a central focus in language learning and teaching.

Vocabulary is the key element in building competence in English. Even when students understand grammatical rules, they may still face obstacles in communication if their vocabulary knowledge is limited. Vocabulary mastery is not simply about memorizing words, but also about understanding their meanings, forms, and appropriate usage in context. According to Nation (2001), vocabulary learning involves both recognition and active application, enabling learners to construct meaningful sentences and convey precise ideas. Therefore, vocabulary is not merely an additional component of language learning but rather the core of the process.

Despite its importance, many students in Indonesia still struggle with vocabulary learning. Observations in classrooms reveal that students often find it difficult to memorize new words and tend to forget them quickly, leading to passive participation in class activities. Fadillah et al (2023) highlight that this problem arises from several factors such as unvaried teaching techniques, lack of motivation, and limited strategies for memorization. This condition results in students having low confidence in expressing their ideas, which further hinders their overall language development. To address this issue, teachers are required to implement more creative, interactive, and effective teaching strategies that can foster students' motivation and improve vocabulary mastery.

One effective alternative is the integration of educational games into the teaching process. Games are interactive tools that allow students to learn while enjoying the activity, thus reducing stress and creating a more relaxed classroom atmosphere. Games also provide opportunities for students to practice language meaningfully, develop problem-solving skills, and engage actively in learning. As Safura & Helmanda, (2022) state, the use of games can increase students' motivation and participation, leading to improved learning outcomes, particularly in vocabulary mastery. By creating a fun learning environment, students become more focused and enthusiastic in their learning process.

Among various types of educational games, maze game is particularly effective for vocabulary learning. Maze Game combines elements of problem solving, exploration, and language practice, where students are required to navigate through a maze by completing vocabulary-related challenges such as matching antonym, finding synonym, or filling in missing words. According to Nurhayati (2015), maze game helps students remember and understand vocabulary in a contextual and enjoyable way. It also improves pronunciation, word recognition, and memory retention. The interactive nature of maze game motivates students to participate more actively, as they not only memorize vocabulary but also apply it in meaningful contexts.

Furthermore, maze game offers several advantages in vocabulary learning. It trains students' concentration, critical thinking, and accuracy while simultaneously strengthening their understanding of word meanings and sentence structures. Students must make quick decisions while navigating maze, which encourages them to recall vocabulary efficiently and apply it correctly. This type of activity also builds collaboration when played in groups, enhances self-confidence, and fosters a positive classroom atmosphere. In line with Terzieva et al., (2022), interactive games such as Maze Game improve vocabulary retention by engaging learners in active word retrieval and contextual usage.

Observations at SMPN 1 Tegalsari revealed that many ninth-grade students still lacked sufficient vocabulary mastery. They often faced difficulties in recalling and applying new words, which limited their performance in reading, writing, and speaking tasks. Based on these findings, the researcher considered it necessary to apply a more innovative and engaging strategy. Maze Game was chosen as a suitable method to address these issues, as it provides an enjoyable yet effective way for students to strengthen their vocabulary skills. By engaging with maze game, students are expected not only to expand their vocabulary knowledge but also to develop better communication skills across all language domains.

Several previous studies also support the effectiveness of Maze Game in language learning. For instance, Pridarani (2018) found that vocabulary games significantly improved ninth graders' vocabulary mastery. Similarly, Widiyanto & Nugraheni (2022) demonstrated that Maze Game in a game-based learning approach enhanced student outcomes and increased motivation. While previous studies focused on general learning outcomes or reading comprehension, this research specifically investigates the effect of Maze Game on vocabulary mastery among ninth-grade students. This distinction highlights the novelty and relevance of the current study.

Based on the background above, the present research entitled "The Effect of a Maze Game on the Vocabulary Mastery of Ninth Grade Students at SMPN 1 Tegalsari in the Academic Year 2025/2026" was conducted. The study aims to examine whether maze Game has a significant effect on improving students' vocabulary mastery and to provide empirical evidence for its application as an effective teaching strategy in English language learning.

RESEARCH METHOD

This study applied a quasi-experimental design with a one-group pretest-posttest format. The participants were ninth-grade students of class IX-C at SMPN 1 Tegalsari in the academic year 2025/2026, consisting of 33 students (19 males and 14 females) selected through purposive sampling. The instrument used was a vocabulary test consisting of 30 multiple-choice questions, with 15 items on antonym and 15 items on synonym, covering adjectives, verbs, and nouns. Each correct answer was scored 3.3 points, with a maximum score of 100. The procedure included administering a pretest, applying Maze Game strategy in treatment sessions, and then giving a post-test. The data from the pretest and post-test were analyzed using SPSS version 27, beginning with a normality test using Shapiro-Wilk, followed by either a paired

sample t-test if the data were normally distributed or a Wilcoxon signed-rank test if the data were not normally distributed.

RESULT AND DISCUSSION

This study presents the results of the effect of maze game on the vocabulary mastery of ninth-grade students at SMPN 1 Tegalsari in the 2025/2026 academic year. The purpose was to examine whether this learning medium had a significant effect on students' vocabulary mastery. The findings are explained in the following sections. In the pretest, students' vocabulary achievement was generally in the low to moderate category. The highest score was 73, obtained by one student, while the lowest was 26. The average score of the class was 55, which indicated that most students had not yet reached the expected standard of vocabulary mastery. The distribution of scores showed that a large number of students were clustered in the intervals between 45–62, meaning that their vocabulary knowledge was still limited. These findings confirmed that before receiving treatment, the majority of students struggled to recognize and use vocabulary, especially in distinguishing antonym and synonym of verbs, nouns, and adjectives.

After the treatment using maze game was implemented in two sessions, the post-test results showed significant improvement. The highest score achieved was 96, while the lowest score was 66. The average score increased to 80, showing an overall gain of 25 points compared to the pretest. Most students scored within the range of 73–90, which indicated a substantial increase in performance compared to the pretest. This result suggested that maze game had successfully helped students to recall, identify, and apply vocabulary more effectively.

To validate these results, a normality test was conducted using the Shapiro–Wilk method, as the sample size was fewer than 50 participants. The significance values were 0.523 for the pretest and 0.106 for the post-test, both greater than 0.05. This confirmed that the data were normally distributed, making them suitable for parametric analysis. A paired sample t-test was then carried out to compare the pretest and post test results. The analysis revealed that the t-value was 23.767, which was far greater than the t-table value of 2.036 at a 5% significance level. Since the obtained t-value exceeded the critical value, the alternative hypothesis (H_a) was accepted and the null hypothesis (H_0) was rejected. This confirmed that maze game had a statistically significant effect on students' vocabulary mastery.

The treatment sessions were carried out over two meetings. In the first session, students focused on antonym and were asked to find opposite word pairs through maze worksheets. In the second session, the focus shifted to synonym, where students had to identify word pairs with similar meanings. During both sessions, students worked individually but were actively guided and monitored by the researcher. The activities required students to analyze words carefully, choose the correct paths in maze, and reflect on their answers. This learning process not only improved their vocabulary knowledge but also fostered independence, concentration, and problem-solving skills. The active participation of students throughout the sessions created a more engaging and motivating classroom environment.

The improvement in post test scores was closely related to the interactive and problem-solving nature of maze game. By requiring students to navigate mazes to

identify antonym and synonym, the activity gave them opportunities to apply vocabulary knowledge in meaningful contexts. This approach allowed them to associate words more clearly and strengthen their memory through practice. As Terzieva et al (2022) highlight, games can enhance vocabulary mastery by creating enjoyable yet cognitively demanding tasks that promote deeper processing of language. In this study, maze Game provided exactly such conditions, enabling students to build stronger associations between words and their meanings.

These findings are consistent with Mayasari, (2016), who emphasized that vocabulary mastery involves understanding relationships between words and applying them in different contexts, not just memorizing definitions. Through maze game, students were able to classify and connect vocabulary items into antonym and synonym, thereby constructing a more systematic framework of word knowledge. This framework supported long-term retention and more accurate application in communication.

The data clearly demonstrated that maze game was effective in improving the vocabulary mastery of ninth-grade students at SMPN 1 Tegalsari. The notable increase in post-test scores, combined with the results of the paired sample t-test, confirmed that the treatment had a significant effect. Therefore, the alternative hypothesis (H_a) – “There is an effect of a Maze Game on the vocabulary mastery of ninth-grade students at SMPN 1 Tegalsari in the academic year 2025/2026” – was accepted. Based on these findings, maze game can be considered an innovative and effective strategy to enhance vocabulary learning at the junior high school level, providing students with a fun, interactive, and meaningful learning experience.

CONCLUSION

Based on the findings and discussion presented in the previous chapter, it can be concluded that Maze Game has a positive effect on increase the vocabulary mastery of Ninth Grade Student at SMPN 1 Tegalsari. Students' vocabulary mastery has an increasing score after participating in two treatment sessions, as evidenced by the increase in the average score from 51 on the pre-test to 79 on the post-test. The statistical result of the paired sample t-test showed a difference that was highly significant between the pre-test and the post-test. with a calculated t-value of 23,767, which is higher than the t-table value of 2.036. The significance value of 0.001 was less than 0.05, indicating that the difference between the pre-test and post-test scores is statistically significant. Therefore, the alternative hypothesis (H_a) is accepted, and the null hypothesis (H_o) is rejected. In other words, it can be concluded that maze game has a positive effect on the vocabulary mastery of ninth grade students at SMPN 1 Tegalsari in the 2025/2026 academic year.

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