

THE EFFECT OF RIDDLE GAME STRATEGY ON STUDENTS' VOCABULARY MASTERY AT SMP NEGERI 3 PEMATANGSIANTAR

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ABSTRACT

Vocabulary is a fundamental component of language acquisition, serving as the building block for communication skills such as speaking, writing, listening, and reading. However, many Indonesian students face challenges in mastering English vocabulary due to monotony in teaching methods and anxiety. This study aims to investigate the effect of the Riddle Game Strategy on students' vocabulary mastery. The research employed a pre-experimental design with a one-group pretest-post-test model. The population of this study consisted of eighth-grade students at SMP Negeri 3 Pematangsiantar in the academic year 2025/2026, totalling 450 students. A purposive sampling technique was utilized to select class VIII-5, comprising 31 students, as the sample. The data were collected through pre-test and post-test instruments. The findings indicate a significant difference in students' vocabulary scores before and after the treatment. The Riddle Game Strategy proved effective in creating an enjoyable learning atmosphere, enhancing motivation, and facilitating active vocabulary retention. Therefore, it is concluded that the Riddle Game Strategy has a significant positive effect on students' vocabulary mastery.

Keywords: *Vocabulary Mastery, Riddle Game Strategy, Pre-Experimental Design*

INTRODUCTION

BACKGROUND OF RESEARCH

Language is an essential tool for human interaction and communication. In the era of globalization, English serves as a global lingua franca, crucial for business, diplomacy, and education. Consequently, the Indonesian government has recognized English as a mandatory subject, starting from elementary school under the *Kurikulum Merdeka*.

Among the four core language skills listening, speaking, reading, and writing vocabulary serves as the critical foundation. As stated by Nation (2001), vocabulary is central to language ability. Without a sufficient lexicon, students struggle to express ideas fluently and accurately. However, observations at SMP Negeri 3 Pematangsiantar revealed that many students face difficulties in vocabulary mastery. Issues included the inability to recall words, poor pronunciation (e.g., mispronouncing "live" as "life"), and a general lack of confidence to speak due to limited vocabulary.



Traditional methods of teaching vocabulary, often focused on rote memorization, have contributed to student boredom and anxiety. To address this, educators need innovative strategies that make learning engaging. One such strategy is the use of games, specifically Riddle Games. A riddle is a puzzle or question requiring creative thinking to find an answer (Al-Musawi, 2012). The Riddle Game strategy encourages students to guess words based on descriptions or clues, fostering a relaxed and enjoyable learning environment.

This research aims to answer the problem: "Is there any significant effect of riddle game strategy on students' vocabulary mastery at SMP Negeri 3 Pematangsiantar?"

REVIEW OF RELATED LITERATURE

Vocabulary Mastery

Vocabulary is the collection of words a person knows and understands to communicate effectively (Diamond & Gutlohn, 2006). Mastery of vocabulary goes beyond knowing definitions; it encompasses understanding the form, pronunciation, grammatical function, and contextual use (Nation, 2001). Mastery is crucial for developing both receptive skills (reading, listening) and productive skills (speaking, writing).

Riddle Game Strategy

A riddle is a question or statement with a deliberately hidden meaning, often used as a game to stimulate thinking. Sharndama and Mangaji (2014) define riddles as descriptive statements demanding answers through association. In language teaching, Riddle Games serve as a "guessing game" where students use critical thinking to identify vocabulary based on provided clues. This strategy shifts the classroom dynamic from passive listening to active problem-solving.

Advantages of Riddle Games

According to Prensky (2001) and Krashen (1982), games lower the "affective filter," reducing anxiety and increasing motivation. Riddle games specifically help students:

1. Enhance Motivation: The element of challenge makes learning fun.
2. Active Learning: Students actively recall words rather than passively memorizing them.
3. Contextual Learning: Words are learned through descriptive contexts, aiding retention.



Previous studies by Puspita Sari Nasution (2019) and Rikawati (2021) have shown that Riddle Games significantly improve students' vocabulary scores, supporting the hypothesis that this strategy is effective for junior high school students.

METHODOLOGY

Research Design This study adopted a quantitative approach using a Pre-Experimental Design with a One-Group Pretest-Posttest model. The design is represented as:

- **O1 X O2**
 - *O1*: Pre-test (measuring initial vocabulary ability).
 - *X*: Treatment (implementation of Riddle Game Strategy).
 - *O2*: Post-test (measuring vocabulary ability after treatment).

Location and Population

The research was conducted at SMP Negeri 3 Pematangsiantar, located on Martimbang Street. The population comprised 450 students from 11 classes of the eighth grade (VIII-1 to VIII-11).

Sample and Sampling Technique

Purposive sampling was employed to select the sample. Class VIII-5, consisting of 31 students, was selected as the sample for the study.

Data Collection and Analysis

Data were collected using a vocabulary test (multiple-choice or essay) administered as a pre-test and post-test. The analysis involved:

1. Descriptive Statistics: To calculate the mean, median, mode, and standard deviation.
2. Normality Test: To ensure the data was normally distributed.
3. Inferential Statistics: A Paired Sample T-test was used to determine the significance of the difference between the pre-test and post-test scores.

FINDING AND DISCUSSION



The analysis compared the students' vocabulary scores before and after the intervention. The pre-test scores reflected the students' initial struggle with vocabulary, consistent with the background problem where students found it difficult to recall and pronounce English words. Following the treatment using Riddle Games, the post-test scores showed a marked improvement.

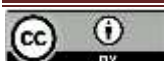
Analysis

Statistical analysis was performed to test the hypothesis:

- **H₀ (Null Hypothesis):** There is no significant effect of Riddle Game Strategy on students' vocabulary mastery.
- **H_a (Alternative Hypothesis):** There is a significant effect of Riddle Game Strategy on students' vocabulary mastery.

The findings of this research show that the use of riddle game strategy significantly improved students' vocabulary mastery. This is supported by the increase in the mean score from 67.19 in the pre-test to 82.71 in the post-test, with a mean difference of 15.52 points. In addition, the result of the paired sample t-test showed that the significance value was 0.000, which is lower than 0.05. This indicates that there is a statistically significant difference between students' scores before and after the treatment. This finding is in line with the theory proposed by Jonathon Reinhardt (2019), who states that digital game-based language learning can improve vocabulary acquisition because it provides authentic context, encourages interaction, and facilitates active language use. In this research, the riddle game created an interactive and meaningful learning environment, which helped students understand and remember vocabulary more effectively.

Furthermore, this result also supports the theory of Marc Prensky (2001), who argues that games increase students' motivation and engagement in learning. During the implementation of the riddle game, students were more active, enthusiastic, and interested in the learning process. This increased engagement contributed to better vocabulary mastery. In addition, the improvement of students' scores can also be explained by Stephen Krashen



(1982) through the Affective Filter Hypothesis. The use of games in the classroom creates a relaxed and enjoyable atmosphere, which lowers students' anxiety and makes them more excited to learning new vocabulary. Therefore, based on both the statistical results and the supporting theories, it can be concluded that the riddle game strategy is effective in improving students' vocabulary mastery.\

The reflection from the process of this research,for the first time the students do the pre test without preparation. The students don't know how to answer the pre test because the test is different with a test the students often answered. From the pre test, the researcher know their ability about vocabulary. After that,in the second time the researcher explain what is riddle game and learning about vocabulary by using picture card to help the students easier to understand. The researcher really appreciated the students response about the riddle game strategy, the students more active and enjoy the class. After that,the researcher make a post test and the result is good because the students score in post test is better than the pre test. It can conclude that riddle game strategy has a significant effect to the ability of the students on vocabulary mastery.

Discussion

The improvement in scores can be attributed to the nature of the Riddle Game Strategy. Unlike monotonous drilling, riddles provided a "puzzle" aspect that intrigued the students.

1. Active Recall: Students had to dig into their memory to find words matching the clues, strengthening neural connections.
2. Reduced Anxiety: The game format lowered the pressure of making mistakes. As noted in previous research (Megi et al., 2023), riddles create a positive classroom climate.
3. Contextual Understanding: Students learned the *meaning* of words through the descriptions in the riddles, not just memorizing translations.



The findings align with the study by Rikawati (2021), which found a significant jump from a pre-test mean of 42.4 to a post-test mean of 76.8 using the same strategy. Thus, the Riddle Game Strategy was proven effective for the eighth-grade students of SMP Negeri 3 Pematangsiantar.

CONCLUSION

Based on the research findings and data analysis, it is concluded that there is a significant effect of the Riddle Game Strategy on students' vocabulary mastery at SMP Negeri 3 Pematangsiantar. The strategy successfully improved students' ability to understand and recall vocabulary, effectively rejecting the Null Hypothesis (H₀).

Suggestion

1. For Teachers: English teachers are encouraged to implement Riddle Games as a supplementary strategy to make vocabulary lessons more engaging and interactive.
2. For Students: Students should practice with riddles independently to enhance their critical thinking and vocabulary retention in a fun way.
3. For Future Researchers: Future studies could expand the sample size or compare Riddle Games with other game-based strategies to validate the results further.

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