

**IMPROVING THE STUDENT'S VOCABULARY BY USING  
INTERACTIVE PUZZLE GAME**

**ARTICLE**



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**RATIFICATION**

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# Improving The Student's Vocabulary by Using Interactive Puzzle Game

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## **Abstract**

This research aimed at finding the effectiveness of puzzle game when teaching vocabulary and to know the improvement of students' vocabulary after using puzzle game for the eight graders at MTS NW Suradadi in the school year 2023. The design of this research was a pre-experimental research with pre-test and post-test design. The sample was taken by cluster sampling technique as a type of probably sampling. The sample was one class consisted of 22 students. The instrument was an objective test. The present researcher used descriptive statistics and paired sample t-test to know whether the alternative hypothesis was accepted or not. Based on the data gained, the present researcher found that the mean score of post-test (82.91) was higher than score of pre-test (54.55), it mean that there was a significant difference in the mean score between pre-test and post-test,  $t(df=21) = -12.1$  at  $p=0.00$  that was lower than 0.05. It mean that the alternative hypothesis was accepted. It can be described that Puzzle game was significantly effective in improving students' vocabulary for the eight graders students at *MTS NW Suradadi* in the school year 2023.

**Keywords:** *Puzzle Game, Vocabulary mastery*

## 1. Introduction

According to Piria (2021) language is a tool of communication. Language can connected people with other people. People can understand each other with the language. It is used to express idea and share feeling. Without language, people will get difficulties in convey their ideas and massage. There are many languages, which are used and learned by people in many different places in many different ways. English is one of the languages used by people to interest each other. As one of the international languages, English is the first foreign language learned and taught in most school (Octaviani, 2020). English in Indonesia has been taught to the students since they were in the elementary school until university. It because teaching English for primary level of schooling is important (Hamied, 2020).

According to Aminatun (2021) learning English is not easy, many students think that English is so difficult to understand, difficult to read well because different writing and different spelling and pronounce. Learning language cannot be separated from learning vocabulary. According to Sari (2021) vocabulary is the most important component language because it affects the four language skills. Generally, vocabulary is the knowledge of meaning of words (Schmitt, 2020).

Many experts say that there are three language components that we know and must be mastered by the students or learners they are grammar, pronunciation, and vocabulary. Vocabulary is one of the language components in learning English because it is important to make students speak English well. According to Anwar (2018), vocabulary is one of the important aspect in learning language because vocabularies carry meaning which are utilized in communication. Vocabulary is one of important aspects in learning a foreign language. It is the basic competence for students. According to Fitri (2021) the vocabulary cannot separated from other elements of English in teaching learning process especially in junior high school, because vocabulary influences the ability of students in studying English language.

English language vocabulary is not easy to be increased without a paper way how to build it up. Gamlo (2019) said “One of the ways to teaching strategies that can make students motivated to learn English is learning while playing a game”. The use of games not only will change the dynamic of class but also help students study easy and help the brain to learn more effectively. The more exiting and interactive the teacher can make learning environment, the more teachers tries to introduce games and activities more (Kerimbayev, 2020). Many students did not know the meaning of English words within the text. In addition, the students also wrote the words with wrong spelling.

Based on the result of the evaluation (Rais, 2020) it is found that the score achieved by the students is still below the minimum standard score. With this score, the teacher thinks it is important to improve the students' achievement. It is important to use suitable techniques to improve students'

vocabulary. And also, the teacher has to do some efforts in order to improve the students' vocabulary.

Based on those problems, the writer would like to help teacher to solve the students' difficulties in learning vocabulary by providing a new technique to be implemented in the class. An appropriate technique delivered by the writer is by using game, especially using puzzle game.

Games can be useful to stimulate the classroom atmosphere. According to Ria (2022) for many students, games are intrinsically motivating. Game is an activity which entertaining and engaging, often challenging, and an activity in which the learner play and usually interact with others (Brazier, 2021). In addition, many efforts are able to be used for students that given by teachers such as and culturally. Based on the background, the researcher is interested in conducting a research entitled: "Improving the Student's Vocabulary by Using Interactive Puzzle Game".

## **2. Method**

### **2.1 Participants**

The participant of this study were the eight class of MTS NW Suradadi which consisted 22 students. The sample was taken by cluster sampling technique as a type of probably sampling. The researcher took the eight A class as the Pre experimental class.

### **2.2 Data Collection**

#### **2.2.1 Instrument of Collecting Data**

In conducting this research, the researcher used vocabulary test as the research instrument. The test divided into pretest and posttest. The pretest was conducted first, before giving the treatment. Then, the post test was conducted to measure the performance of the students in using puzzle game in vocabulary after getting the treatment.

#### **2.2.2 Techniques for Collecting Data**

In collecting data, the researcher taught vocabulary test in class by using puzzle at the eighth grade students of MTS NW Suradadi. This test consisted of vocabulary with 30 items. Before testing it, the researcher would do the pretest to know ability's student before giving treatment. After giving pretest, the researcher gave treatment to drill ability's students about vocabulary related with the topic. After giving treatment, the researcher gave posttest. Posttest was used to know ability's students after getting treatment. Then, the result of test would be compared between pretest and posttest score whether differences or not. If there any differences score, it showed that treatment was successful and if there no differences score, it showed that treatment was unsuccessful.

### **2.3 Data analysis**

The analysis used in this study is in the form of quantitative data. The quantitative data of this research will be collected from the tests conducting. The

researcher conducted test to the students before and after they were taught by using Puzzle Game.

Data that was the students' scores obtained from the pretest and posttest would be analyzed statistically. The present researcher used descriptive statistics and paired sample t-test to know whether the alternative hypothesis was accepted or not. Based on the data gained, the present researcher found that the mean score of post-test (82.91) was higher than score of pre-test (54.55), it means that there was a significant difference in the mean score between pre-test and post-test,  $t(df=21) = -12.1$  at  $p=0.00$  that was lower than 0.05. It means that the alternative hypothesis was accepted. It can be described that Puzzle game was significantly effective in improving students' vocabulary for the eighth graders students at *MTS NW Suradadi* in the school year 2023.

### 3.

### Result

#### 1. Descriptive Statistics

The present researcher used the descriptive statistics in analyzing the data. This section discusses the result of research on improving the students' vocabulary by using interactive puzzle game. In this study, the researcher chose one class as the sample, namely class VIII A of *MTS NW Suradadi* with 22 students. In the beginning, the present researcher measured the mean score to find out a single score that gave the indication of the ability of the students on an achievement test. The mean score was got from the students' pretest and post-test. It was calculated previously from the score of each student.

If the students' answer is right they got one (1) score and if they are wrong, they got zero (0) score. The test was an objective test which consisted of 30 items. The test was related to students' vocabulary. To find out the mean and the standard deviation of each pre-test and the post-test the present researcher were performed using SPSS 22 for windows. Based on the result of the calculation, the present researcher found that mean score in pretest was 54.55 and 82.91 in posttest, while the standard deviation of pretest was 9.11 and 7.90 in posttest. It means that the students' vocabulary in posttest was improved.

#### 2. Hypothesis Testing

Testing hypothesis was conducted to know whether null hypothesis ( $H_0$ ) was accepted or rejected. To analyze whether there was a significant difference in the mean score between the pre-test and the post-test, the present researcher used a paired-sample t-test to get answer of the hypothesis. After performing a paired-sample t-test, the present researcher found that there was a significant difference in the mean scores between the pre-test and the post-test,  $t(df=21) = -12.1$  at  $p=0.00$ , it means that the alternative hypothesis ( $H_a$ ) was accepted.

#### **4. Discussion**

The goal of this study were: (1) To know whether or not the use of puzzle game to improve the students' vocabulary for the eight grade at MTS NW Suradadi in the school year 2023. (2) To know how effective is puzzle game in improving students' vocabulary mastery for the eight grade at MTS NW Suradadi in school year 2023.

Based on the data collected from pre-test without using puzzle the score was 54.55. After teaching by using puzzle and giving post-test the mean score was 82.91 it means, teaching by using puzzle game in vocabulary subject has reinforced their ability in memorizing vocabulary. After giving the test, they got the better scores than before. Based on the results of the research that, the fact can be seen from the total score of the students. It mean that the use of puzzle is better than without.

The result of the study discovered that puzzle game was significantly effective in improving students' vocabulary mastery. Puzzle game is one of games which is used to help students learn their lesson in English class easy and more enjoyable. However, Puzzle is game or toy to exercise mind (Sarmiento, 2019). In teaching and learning process, the important thing is not only how much or how less teaching and learning are done in the classroom, but also how the students are active and fun in their learning process. It mean that puzzle game is effective method to use in the classroom.

#### **5. Conclusion**

These are the conclusions based on the data that have been collected and analyzed from the research at MTS NW Suradadi refers to student's vocabulary:

1. Puzzle game was effective in improving students' vocabulary for the eight graders at MTS NW Suradadi in the school year 2023. It could be seen from the result at research that post-test was higher than pre-test, the mean score of pre-test was 9.11 and post-test was 7.90
2. Puzzle game was significant effective in improving students' vocabulary mastery for eight graders at MTS NW Suradadi in the school year 2023. The result can be seen from the significant difference between the pre-test and post-test,  $t(=21) = -12.1$  at  $p=0.00$ . Meaning that the null hypothesis was rejected and alternative hypothesis was accepted.



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