

# THE IMPLEMENTATION OF EDPUZZLE WEBSITE INTERACTIVE VIDEO FOR DEVELOPING STUDENTS' ENGLISH VOCABULARY

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## ABSTRACT

This study aimed to determine the effect of using Edpuzzle interactive videos on students' vocabulary mastery at SMP Ihsaniyah Kota Tegal in the academic year 2025/2026. This research applied a quantitative approach with a quasi-experimental design using a pre-test and post-test control group. The sample consisted of 60 seventh-grade students divided into an experimental class (VII D) and a control class (VII E). The experimental class was taught using Edpuzzle interactive videos, while the control class used conventional teaching methods. The data were analyzed using descriptive statistics and an Independent Sample T-Test. The findings revealed that the experimental class obtained a higher mean score (80.20) compared to the control class (75.33). The significance value was  $0.004 < 0.05$ , indicating a significant difference between the two groups. Therefore, Edpuzzle interactive videos significantly improve students' vocabulary mastery.

**Keywords:** *Edpuzzle Website, Interactive Video, Vocabulary Mastery, EFL, Junior High School.*

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## INTRODUCTION

Vocabulary plays a fundamental role in language learning because it supports the development of listening, speaking, reading, and writing skills. Nation (2001) states that vocabulary knowledge is central to language proficiency. Without sufficient vocabulary, students struggle to comprehend texts and express their ideas effectively. In junior high school contexts, vocabulary mastery becomes even more important because students are still building foundational English skills. However, many students experience difficulties in vocabulary learning due to traditional teaching approaches such as memorization and textbook-based instruction. These methods often limit student engagement and meaningful interaction with the language. The integration of technology in education offers alternative solutions. Multimedia learning theory suggests that students learn better when verbal and visual information are presented together (Mayer, 2009). One digital tool that supports interactive multimedia learning is Edpuzzle. Edpuzzle allows teachers to embed questions and notes into videos, encouraging active participation. Previous studies have shown positive effects of Edpuzzle on vocabulary learning (Rini & Marpaung, 2024). However, research at the junior high school level in Tegal remains limited. Therefore, this study aims to investigate:

1. Whether Edpuzzle improves students' vocabulary mastery.
2. Whether there is a significant difference between students taught using Edpuzzle and conventional methods.

## METHOD

This study employed a quantitative quasi-experimental design with pre-test and post-test control class. The population consisted of 240 seventh-grade students, and the sample included 60 students divided into experimental and control class. The instrument was a validated and

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reliable vocabulary test (Cronbach's Alpha = 0.825). Data were analyzed using Shapiro-Wilk normality test, Levene's homogeneity test, and independent samples t-test using SPSS.

### **Respondents**

*The participants were 60 seventh-grade students of SMP Ihsaniyah Kota Tegal in the academic year 2025/2026. Class VII D (30 students) served as the experimental group, while class VII E (30 students) served as the control group. Purposive sampling was applied to select classes with similar academic backgrounds.*

### **Instruments**

The instrument used was a multiple-choice vocabulary test. A validity test showed that 20 items were valid ( $r > 0.361$ ). The reliability test using Cronbach's Alpha yielded 0.825, indicating high reliability.

### **Procedures**

The study consisted of six meetings. The first meeting introduced the research. The second meeting administered the pre-test. The third to fifth meetings involved treatment using Edpuzzle in the experimental class and conventional teaching in the control class. The final meeting administered the post-test.

### **Data analysis**

Data were analyzed using descriptive statistics, Shapiro-Wilk normality test, Levene's homogeneity test, and Independent Samples T-Test with a significance level of 0.05.

## **FINDINGS AND DISCUSSION**

### **Vocabulary Improvement in Experimental and Control Class**

The descriptive statistics showed that the experimental class improved from a mean score of 73.07 (pre-test) to 80.20 (post-test). Meanwhile, the control class improved from 70.30 to 75.33. The improvement in the experimental group (7.13 points) was higher than that of the control class (5.03 points).

### **Is Edpuzzle Effective in Improving Students' Vocabulary Mastery?**

*The first research question aimed to determine whether the use of Edpuzzle interactive videos was effective in improving students' vocabulary mastery. Based on the Independent Sample T-Test result, the significance value was 0.004, which is lower than 0.05. This means that there was a statistically significant difference between the experimental and control groups. Therefore, the null hypothesis ( $H_0$ ) was rejected, and the alternative hypothesis ( $H_1$ ) was accepted.*

*This finding supports Nation's (2001) argument that vocabulary learning requires meaningful exposure and repeated contextual practice. Through Edpuzzle, students did not merely memorize words but encountered vocabulary in authentic video contexts. The embedded comprehension questions also ensured active processing, which strengthened long-term retention*

**Is There a Significant Difference Between Students Taught Using Edpuzzle and Conventional Method?**

The second research question examined whether there was a significant difference between *students taught using Edpuzzle and those taught using conventional methods. The mean difference between the two groups was 4.86667. The calculated t-value (3.035) was higher than the t-table value (2.001), confirming a significant difference in post-test scores.*

*Students in the experimental group showed higher engagement during the treatment sessions. They were more active in answering questions, replaying videos, and discussing*

*vocabulary items. In contrast, the control group relied mainly on textbook explanations and memorization. This supports previous findings by Rini and Marpaung (2024), who reported that Edpuzzle significantly enhances vocabulary learning outcomes in junior high school contexts.*

## CONCLUSIONS

This study concludes that the use of Edpuzzle interactive videos significantly improves students' vocabulary mastery at SMP Ihsaniyah Kota Tegal. The experimental group achieved a higher mean post-test score (80.20) compared to the control group (75.33). The statistical analysis showed a significance value of 0.004, which is lower than 0.05, indicating a significant difference between the two groups.

The findings demonstrate that integrating interactive multimedia in vocabulary instruction enhances student engagement, retention, and comprehension. Edpuzzle provides contextual exposure, interactive assessment, and self-paced repetition, which collectively contribute to vocabulary development. Therefore, Edpuzzle is recommended as an effective instructional medium for vocabulary teaching in junior high schools.

## FIGURE AND TABLES

Table 1. Descriptive Statistics of Students' Vocabulary Scores

| Group        | Pre-Test Mean | Post-Test Mean | Improvement |
|--------------|---------------|----------------|-------------|
| Experimental | 73.07         | 80.20          | 7.13        |
| Control      | 70.30         | 75.33          | 5.03        |

Table 2. Independent Sample T-Test Result

| t-value | df | Sig. (2-tailed) | Mean Difference |
|---------|----|-----------------|-----------------|
| 3.035   | 58 | 0.004           | 4.86667         |

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## REFERENCES

- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). SAGE Publications.
- Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). Cambridge University Press.
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge University Press.
- Rini, E. S., & Marpaung, M. S. (2024). The effect of using Edpuzzles in teaching vocabulary. *NUSRA: Jurnal Penelitian dan Ilmu Pendidikan*, 5(2), 466–474.
- Knapp, P., & Watkins, M. (2005). *Genre, text, grammar: Technologies for teaching and assessing writing*. UNSW Press.