# THE EFFECT OF USING EDPUZZLES IN TEACHING VOCABULARY

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#### ABSTRACT

This study investigates the effectiveness of using the Edpuzzle application in improving students' vocabulary knowledge and understanding in English language learning. An experimental design was employed with pre- and post-tests conducted on seventh-grade students from SMP 1 Parongpong, Jawa Barat. The experimental group utilized Edpuzzle, while the control group employed conventional teaching methods. Data were analyzed using descriptive statistics, normality tests, and paired sample t-tests. The results indicate a significant improvement in vocabulary knowledge among students who utilized Edpuzzle. The post-test scores (M=68.92) were substantially higher than the pre-test scores (M=41.97), demonstrating the effectiveness of Edpuzzle in enhancing students' vocabulary skills. However, challenges such as limited access to technology and unstable network connectivity were identified as factors influencing the extent of vocabulary improvement. In conclusion, integrating Edpuzzle into language teaching practices holds promise for enhancing vocabulary learning outcomes and engaging students in active learning experiences.

Keywords: Edpuzzle Application, Vocabulary Learning, English Language Education

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### **INTRODUCTION**

English is a crucial international language for communication in various industries, including technology, and unquestionably in education. In this period of globalization, having a strong and varied vocabulary will be advantageous in many situations. In reality, students frequently struggle to broaden and combine their vocabulary in the context of learning. When they have mastered vocabulary, they can quickly master four skills: reading, speaking, listening, and writing (Hasan, 2018). Learning English itself has an essential function in the development and education of students, such as the development of knowledge and technology, and students must be able to support each of their education developments.

Vocabulary is a fundamental aspect of language, a match made in heaven up of many different types of words that serve distinct functions in communication. A person can speak effectively, comprehend a text, and convey ideas if they have a big enough vocabulary. A strong vocabulary is essential to learning a second language, as stated by Nation (2001). Learning a second language vocabulary seems easy for everyone, but it differs for some students. Since English is different in writing and pronunciation, and English words sometimes have more than one meaning, some EFL/ESL found it difficult to understand English words. As a result, EFL/ESL learners feel unconfident when using the word, and they feel afraid. Learning vocabulary is very important for the success of the lesson. If the teaching and learning are inconsistent, we cannot gain enough vocabulary and use the correct structure. This means that it is essential for teachers and learners to accommodate students and influence vocabulary learning significantly. Teachers must have a good strategy or approach to help students master the vocabulary and provide effective teaching. As teachers, we must also be consistent in teaching vocabulary. Based on the skills that students need to acquire when learning a second language, it is hoped that students can acquire the means to learn both speaking and writing; with this, students must understand English as a document or media. Research on vocabulary skills in development English language acquisition is therefore highly relevant.

Students should be able to use English terminology and be willing to teach English. Developing a standardized vocabulary will show children that they can profit greatly. On the other hand, grammatical rules are entirely irrelevant to the nature of communicative interaction. Students cannot communicate in English if they do not possess a strong vocabulary, which is a crucial component of language. Consequently, many pupils still struggle to learn English. Researchers are anticipated to be more innovative in presenting the material due to appreciating the value of vocabulary in providing teachers and students with exercises that inspire happy pupils to study English.

Numerous kids still struggle with learning English. Because vocabulary is valued in offering exercises to teachers and students that can motivate and make students happy to study English, researchers must be more creative in presenting the material. The ability of students to master vocabulary can be improved via various methods. Edpuzzle can be considered a method for students to practice and not merely read textbooks from a teacher.

With the advancement of technology, educational materials have evolved into

hybrids of audio, visual, text, and animation. Interactive media, such as the Edpuzzle (Mishra & Sharma, 2011), commonly use multimedia elements, such as graphics, text, sound, video, and animation. Teachers can select videos and adapt them to the needs of their courses by adding question types such as multiple-choice questions, audio tracks, audio notes, or comments to videos with a primary focus on assessment in the EdPuzzle application (Prawati in Ipek & Ustunbas 2021). Interactive media like EdPuzzle (www.edpuzzle.com) can enhance the learning experience distance because students can take quizzes during the video, teachers can evaluate courses, provide voice notes, and more. Videos can also be shared (Abou et al., 2018). Teachers cannot freely comment on whether a student's response is correct or incorrect since EdPuzzle lacks interactive media. Teachers cannot provide guidance or explanations as to why students' responses are correct or incorrect; they can only confirm that the answers are correct or incorrect.

According to the issues and findings of earlier research, vocabulary learning techniques utilizing interactive media, such as EdPuzzle, appeared to be crucial for teaching vocabulary. In order to construct the research problems as follows: how to use the interactive media EdPuzzle in vocabulary learning, this study set out to describe how EdPuzzle is used in vocabulary learning for junior high school students.

# Edpuzzle

A website called Edpuzzle has interactive films for educational reasons. An essay about this medium has been written by Auer and Tsiatsos (2018) (Auer & Tsiatsos, 2018). They describe Edpuzzle as a helpful website that enables teachers to design courses utilizing published content from YouTube, TED Talks, and other Video resources in their posts. Teachers can clip videos on this website and add annotations, additional video references. audio commentary, various question formats, and teacher recordings. On this website, educators can produce videos they can utilize as teaching resources. This website falls under the learning management system category because it enables (LMS) instructors to keep an eye on their students' academic behavior. Teachers can monitor students' time watching the video, working through the lesson, finishing evaluations, and grading (Emiliya et al., 2021). Because this straightforward website can be viewed through its smartphone app, it qualifies as a Mobile-Assisted Language Learning (MALL) medium.

According to Otair and Aziz (2017), students may have trouble listening if videos are too long, they have limited time to finish their assignments, or they cannot replay specific video segments. Children will not want to watch a long movie repeatedly and will not pay attention to the new terminology they learn. For these reasons, we suggest Edpuzzle as a tool for resolving issues with children's learning. They can use Edpazzle to meet their demands, which will not bore them. At the same time, they watch videos to study because it intersperses the video with questions that will expand their vocabulary knowledge and sharpen their concentration. To enhance pupils' memory skills in grade 7, this study employs an interactive movie from Edpuzzle. Increasing Vocabulary through the Use of Edpuzzles in Junior High School English Language Learning is the title of this study. This study explores how Edpuzzle media might help us design more effective learning. As a result, the following research topics are the main emphasis of this study. Does using Edpuzzles help students learn more vocabulary when they are studying English? 2. When utilizing Edpuzzles, do students with varying degrees of English proficiency have varied results in terms of vocabulary learning?

# **Teaching Vocabulary**

Developing a strong vocabulary is a crucial component of learning a language since it plays a significant role in language acquisition and enhancing communication abilities. Agnes, Lucy, and Donohue (2015) state that mobile pedagogical language learning can be implemented in various the following: methods, including (1)Include activities that address the communication needs of teachers both within and outside the classroom. (2) Introduce language to students as a living, breathing model. (3) Integrate the four abilities-writing, speaking, listening, and reading. (4) Give students timely feedback and scaffolding. (5) Give students the chance to interact with peers and other English users outside the classroom, negotiate in context. and create varied and creative discussions. (6) allow students to practice writing and speaking, as these skills can be particularly challenging in the classroom. Teaching vocabulary to students comprises a variety of methods and approaches aimed at helping them acquire, remember, and understand words and phrases in the language of instruction. Routine learning, based on context learning, and exposure to local language usage are standard components of traditional techniques. However, educators use more digital resources and applications as technology develops to help students' vocabulary. Contemporary approaches emphasize interactive and engaging techniques that promote active participation and deeper understanding. (Brown, 2019).

#### Learning Vocabulary

Learning vocabulary is dynamic and impacted by a person's learning style, exposure to language, and teaching strategies. According to research, multimodal encounters, relevant contexts, and active involvement all support more thorough vocabulary learning and retention. Technology-enhanced environments also facilitate learning by providing possibilities for rapid feedback and individualized instruction (Webb & Nation, 2020).

# **Kinds of Vocabulary**

There are several categories of vocabulary, such as receptive vocabulary (words recognized when encountered) and productive vocabulary (words employed in expression). Furthermore, vocabulary can be divided into idiomatic, academic, generic, and domain-specific terms, each of which has a distinctive function in communication. focusing on various vocabularv Bv categories throughout instruction, teachers may guarantee that students acquire the well-rounded lexical repertoire necessary for fluent language use (Schmitt, 2021).

# **Edpuzzle Application**

With Edpuzzle, educators may make interactive video lessons for students on an educational technology platform. Instructors can integrate videos from many sources and include interactive components like quizzes and questions within the video content. With the help of this platform, teachers may deliver adapted education while keeping an eye on students' progress and giving them specific suggestions. (Chen & Chen, 2022).

# Teaching Vocabulary by Using Edpuzzle Application

Incorporating the Edpuzzle app into vocabulary training is a noteworthy progression in language teaching approaches, providing a diverse strategy to captivate students and promote significant language learning. Edpuzzle's cutting-edge capabilities allow educators to build dynamic and individualized learning experiences quickly. These features include interactive videos, embedded questions, and real-time analytics. Increasing student and encouraging active involvement learning are among the main advantages of using Edpuzzle in vocabulary training. Through interactive films that accommodate various learning preferences and styles, teachers may draw in students and pique their interest in the subject matter. By including embedded questions and activities in the films, educators may better engage students with the material and help them learn vocabulary words and gain a deeper understanding of it.

The Edpuzzle platform's extensive data analysis capabilities also give teachers knowledge insightful about students' learning. Instructors can develop а sophisticated understanding of each student's unique learning needs and modify their course by monitoring their students' development, performance, and engagement levels. With this data-driven method, educators may pinpoint students' areas of strength and weakness, offer focused interventions, and differentiate their instruction to fit their various needs. Studies have indicated that integrating Edpuzzle into vocabulary can be beneficial. According to research by García and Ramírez (2023), students who used Edpuzzle for vocabulary activities had much better vocabulary learning and retention than those who used more conventional teaching techniques. Additionally, because Edpuzzle's interactive nature creates a dynamic and exciting environment, learning including the platform in vocabulary has been proven to enhance student motivation and passion for learning. Using Edpuzzle in language teaching techniques immediately improves vocabulary learning and fits nicely with more significant trends in educational technology and pedagogy. With technology continuing to take center stage in the classroom, websites such as Edpuzzle allow teachers to make the most of digital resources and improve students' educational experiences. Teachers can help kids develop 21st-century skills like digital literacy, critical thinking, and teamwork while giving them the language competence they need to succeed in a globalized society by adopting modern technology.

Teaching vocabulary using the Edpuzzle application represents a promising approach to language instruction that capitalizes on the benefits of technology to engage learners, promote active learning, and improve learning outcomes. Bv integrating interactive videos, embedded questions, and data analytics, educators can create dynamic and personalized vocabulary lessons that cater to the diverse needs of students. As technology evolves, integrating platforms like Edpuzzle into language teaching practices holds great potential to transform language education and empower students to achieve proficiency and fluency in the target language.

# **Hypothesis Test**

The two pre-test and post-test means are to be compared, respectively, using statistical tests. Balnaves and Caputi (2001:40) describe a method for testing whether the null hypothesis can be rejected less than 0.05 by comparing the T-value derived statistics. The following is the research's hypothesis test: (a) If significant amounts are less than 0.05 and zero, the hypothesis cannot be rejected; otherwise, the alternative hypothesis is rejected. This suggests no differences in the students' vocabulary knowledge scores before and after being instructed to utilize the Edpuzzle program. The alternative hypothesis remains unrejected if the significant number exceeds 0.05 and the null hypothesis is rejected. It suggests that students' word awareness scores fluctuate somewhat before and after learning to use the Edpuzzle application.

#### **RESEARCH METHOD**

#### **Types of research**

In this study, an experimental design will be used. Experimental research is the most complete quantitative research approach, meaning it meets all the requirements for testing causal relationships. Sugiyono (2012: 107) defined experimental research methods as methods used to seek the effect of specific treatments on others and controlled conditions. Dependent and independent variables are two types of variables used in this study. Tests are equipment used by researchers to collect data. This study uses pre-and post-tests to assess teamwork before and after completing formalities. The difference between the experimental and control groups is the offer made. The experimental group uses Edpuzzle media, whereas the control group uses conventional methods. Pre-tests and post-tests were used to determine the extent of students' vocabulary knowledge and their understanding when learning by using Edpuzzle as their learning media. These two variables were used to get an overview of the application of Edpuzzle interactive media in developing students' vocabulary in the digital era.

#### **Research subject**

As a data source for research, individuals, groups, objects, or organisms are often referred to as research subjects. In quantitative research, I choose the research subject before I conduct the research and start making a research plan. I used all seventh-grade students as research objects and two classes of seventh-grade students were used for the sampling process. The experimental group consisted of the first class, 7D, and the control group consisted of the second class, 7G. The research was conducted at SMP 1 Parongpong, Jawa Barat.

### **Reserch Instrument**

Comprehension tests at the beginning and end of the research program serve as research tools. The purpose of this study is to find the Edpuzzle application as a means increase students' awareness. to The researchers give the students a pre-test and a Students' satisfaction post-test. and conclusions regarding using Edpuzzle as a learning tool can be seen from the tests given by the researchers. During vocabulary learning, the author reviews the vocabulary to provide feedback and encourage the students. A test is a means to evaluate the awareness, strength, emotions, intelligence, or talents of a person or group (Geja, 1992, p. 154). Furthermore (Ary et al., 2010, p. 201) state that a test is a collection. A stimulus test is presented to a person for a response that can be given a numerical. The learning process uses pre-and post-tests to assess student understanding before using Edpuzzle and after learning. Therefore, the test provides a numerical score that can be used to measure test takers and is a representative sample of individual actions. Researchers monitor classroom performance, engagement, and development when using Edpuzzle in learning.

#### Data gathring procedure

Data collection must follow the steps outlined previously in the instrument. Preand post-tests were used to measure how well students understood the terminology and how satisfied they were with Edpuzzle. The above justification applies if the instrument is valid and trustworthy. I give treatment to students after doing a pre-test so that they learn new vocabulary using Edpuzzle. I give this treatment in ten meetings. After giving treatment to students and to understand their knowledge, I give a post-test.

### **Data Analysis Techniques**

The analysis used in this research uses a quantitative approach. This research provides a detailed analysis of the pre-test and post-test results. This analysis aims to be able to use Edpuzzle as a learning medium to increase vocabulary. Then, here, I compare the average pre-test and post-test scores.

# FINDINGS AND DISCUSSIONS

# **Research Findings**

The Description of Data

This study used pre-and post-tests to compare the vocabulary knowledge of seventh-grade students before and after Edpuzzle instruction. I selected one to serve as a sample for our study. I handed this instrument to the SMP 1 Parongpong students from class VII G. In total, 38 students took part in this study. The maximum pre-test score in this class is 68, while the lowest is 15. In the meantime, 56 is the lowest post-test score, and 80 is the highest. After conducting the pre-and posttests for this study, I collated the findings from the descriptive, T, and normalcy tests. I used IBM SPSS Statistics 20 to determine the pre-post-test results.

# The Analysis of Data

# Normality Test

This test is carried out before the t-test computation. The goal is to determine whether or not the data is usually distributed. The pre-test Shapiro-Wilk table value was 0.267, but the post-test value was 0.506. This indicates the significance of internal data. The pre-test data is considered to be generally distributed as a result of the higher significance value of  $\alpha = 0.05$ .

# **T-test**

The results of the paired sample test indicate that the p-value, also known as the sig (2-tailed), is 0.00 and that the t (df = 37) = -15.096. The alternative hypothesis (Ha) is accepted, and the null hypothesis (Ho) is rejected since the p-value, or sig (2-tailed) 0.00, is less than  $\alpha = 0.05$  (5%)—the significant level used by the author. This indicates that improving students' vocabulary can be achieved using the Edpuzzle app.

# **Descriptive Statistics**

The descriptive statistics of the pretest and post-test indicated a significant difference between the mean of the pre-test, which is 41,97, and that of the post-test, which is 68.92. The standard deviation of the pre-test is 12,87, and the post-test is 5,79. Meanwhile, the standard error of The mean of the pre-test is 2,08, and the post-test is 0,94, While N for each other is 38. This means that implementing the Edpuzzle application as a medium to improve students' vocabulary knowledge has improved students' vocabulary.

### **Hypothesis Test**

It can be inferred from the pre-and post-test findings that at the significance level  $\alpha = 0.05$  (5%), the t-count value (-15.096) was more significant than the t-table value (-2.024). As a result, the null hypothesis (Ho) is rejected, and the alternative hypothesis (Ha) is accepted since the t-value > t-table. This demonstrates how students in seventh grade SMP 1 Parongpong can effectively improve their vocabulary knowledge by using the Edpuzzle application.

### Discussion

In this research, I taught English vocabulary to seventh-grade students at SMP Parongong 1 using the Edpuzzle application. To address research problems, I use tests as an efficient way to collect data. This research aims to find out how the use of Edpuzzle in English vocabulary training affects students' vocabulary knowledge and attitudes towards the use of Edpuzzle in vocabulary teaching. Hopefully, the media will inspire students to learn vocabulary and improve their understanding. While learning, they have fun and will be able to use their improved English in everyday situations.

I will discuss how to determine the usefulness of research results below. There is only one research issue concerning how students' language knowledge affects Edpuzzle. Almost every student performed better on the post-test than on the pre-test. The post-test results showed an increase in student scores. The average post-test score (68.92>41.97) was higher than the pre-test score; this shows a significant increase in student scores before and after treatment. Even though the increase obtained was only 20%, it can be concluded that Edpuzzle improves students' language skills. That is because Edpuzzle is a powerful tool for teaching beginners English vocabulary. Why is the significant improvement only 20%? Several factors influence the use of Edpuzzle, such as not having projectors available in all classes and the network being unstable during learning hours. Therefore, this has a significant influence on increasing vocabulary learning for students.

### CONCLUSION

Several conclusions about the usage of the Edpuzzle application to improve students' knowledge and understanding and its consequences can be made based on the findings and comments reported in Chapter IV of this study:

a) Using Edpuzzle to raise students' comprehension awareness would help them become more proficient. According to the results, the average post-test score is considerably more significant than the pretest score. To be more precise, the pre-test average was 41.29, while the post-test average was 68.92

b) Edpuzzle is a handy resource for teaching and learning vocabulary to students at the beginning level. Students responded well to this medium and had a great deal of interest in it. Because the topic is simple to learn, every student has an equal chance to practice it. Edpuzzle also encourages students to interact with new ideas and lessens learning dissatisfaction.

# REFERENCES

Abou Afach, S., Kiwan, E., & Semaan, C. (2018). How to enhance awareness on bullying for Special Needs Students using "Edpuzzle" a web 2.0 tool. International Journal of Educational Research Review, 3(1), 1-7.

- Ary, D., Jacobs, L. C., & Razavieh, A. (1972). Introduction to research in education.
- Brown, H. D. (2014). *Principles of language learning and teaching: A course in second language acquisition*. Pearson.
- Burns, A. (2009). Doing action research in English language teaching: A guide for practitioners. Routledge.
- Chen, H., & Chen, L. (2022). Exploring the effectiveness of Edpuzzle in flipped language learning: A mixed-methods study. Computer Assisted Language Learning, 1-23.
- Fernández Carril, R. (2002). ISP Nation, Learning Vocabulary in Another Language. Cambridge: CUP, 2001, 417p. Revista alicantina de estudios ingleses, No. 15 (Nov. 2002); pp.
- García, M., & Ramírez, J. (2023). Enhancing vocabulary instruction through Edpuzzle: A case study. Journal of Educational Technology & Society, 26(2), 173-185.
- Geja, J. (1992). Dictionary of educational measurement, testing, and evaluation. Journal of Educational Assessment, 45(2), 154–168.
- Hasan, H. (2018). Improving Students English Vocabulary by Using Tic Tact Toe Game at the second Year of SMP Negeri 7 Satap Maiwa Kabupaten Enrekang. *Edumaspul: Jurnal Pendidikan*, 2(2), 77-86.

- López, A. et al. (2024). *The impact of Edpuzzle on vocabulary acquisition: A quasi-experimental study.* Language Teaching Research, 1-20.
- Marwa, M., Cahyono, B. Y., Latief, M. A., & Prayogo, J. A. (2021). Intercultural topics in the indonesian english language teaching classroom: contextualizing local and neutral cultures to target and global cultures. *Journal of Intercultural Communication*, 21(1), 34-45.
- Mishra, S., & Sharma, R. C. (2005). Interactive multimedia in education and training. Idea Group Pub.
- Nation, I. S. (2005). Teaching and learning vocabulary. In *Handbook of research in second language teaching and learning* (pp. 581-595). Routledge.
- Otair, I., & Abd Aziz, N. H. (2017). Exploring the causes of listening comprehension anxiety from EFL Saudi learners' perspectives: A pilot study. Advances in Language and Literary Studies, 8(4), 79-84. Schmitt, N. (2021). Vocabulary in language teaching. Cambridge University Press.
- Sugiyono, S. (2010). Metode penelitian kuantitatif dan kualitatif dan R&D. *Alfabeta Bandung*, 170-182.
- Ipek, O. F., & Ustunbas, Z. (2021). Applications Used in Distance Education for English Language Classrooms. *JET (Journal of English Teaching)*, 7(3), 260-272.