# THE EFFECTIVENESS OF WORD SEARCH PUZZLE GAME AS MEDIA FOR TEACHING VOCABULARY

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## ABSTRACT

*The insufficient vocabulary of students often leads to their reluctance in applying English language skills. To address this issue and encourage active usage of English, it is crucial to focus on vocabulary development through effective learning practices. In this context, the researcher sought a solution to enhance writing skills and promote a deeper understanding of word meanings. The chosen approach involved incorporating an engaging and enjoyable medium, namely the Puzzle game, as a means of facilitating vocabulary growth. The Puzzle game, specifically the Word Search Puzzle, was selected as it not only serves as a game but also captures students' interest by sparking curiosity about hidden words. In a Word Search Puzzle game, players search for concealed words in provided boxes, guided by word clues. These words may be arranged vertically, horizontally, or diagonally within the grid. The study involves a sample of 20 students selected from the entire population. Utilizing SPSS 22 for calculations, the results indicate statistical significance, leading to the conclusion that the Word Search Puzzle game is effective in enhancing vocabulary. This finding underscores the proven efficacy of the Word Search Puzzle game as a learning medium, demonstrating its capacity to augment students' vocabularies. Consequently, teachers can consider integrating this method into their teaching practices to facilitate effective vocabulary instruction.*

Keyword : *Effectiveness, Puzzle game, Vocabulary*

## INTRODUCTION

In the process of acquiring language skills, encompassing reading, listening, writing, and speaking, the mastery of proper vocabulary, pronunciation, and grammar plays a pivotal role in ensuring clear and understandable communication. Proficiency in vocabulary is particularly essential for students, as it empowers them to comprehend and apply various English language skills effectively (Sangia, 2022). However, a deficiency in vocabulary can hinder students from engaging confidently in English language activities. To address this challenge, the emphasis on practicing and expanding vocabulary becomes imperative for students to enhance their language capabilities (Maylani et al., 2021).

Previous research by Ambiyatul (2018) investigated the impact of utilizing Word Search Puzzle Games on students' vocabulary mastery in the first semester of the eighth grade at SMPN Ambarawa Pringsewu. The study aimed to determine whether the use of word search puzzle games significantly influenced students' understanding of word meaning, form, and usage. The experimental design employed in the research revealed a notable influence on students' word comprehension. Building upon this background, the present study aims to address similar challenges faced by first-grade students at SMPN 03 Kamal Bangkalan, who exhibit reluctance and boredom in learning vocabulary.

In an effort to mitigate students' disinterest and reluctance to memorize word meanings, the researcher proposes the use of an engaging and enjoyable learning medium – the Word Search Puzzle game. The objective is to explore whether this innovative approach effectively increases students' vocabulary at SMPN 03 Kamal Bangkalan. This research seeks to contribute valuable insights into improving the teaching and learning process by introducing the Word Search Puzzle game as an educational tool.

In this case, the researcher aims to utilize the Word Search Puzzle game as a medium to facilitate teaching and learning activities. Media, when effectively employed, serves as a valuable tool to achieve educational goals and enhance the learning experience for both teachers and students (Miftah, 2013). In this study, the Word Search Puzzle game is considered an innovative learning medium, offering an alternative to conventional methods (Pamungkas & Ghofur, 2021).

Teaching vocabulary is a crucial aspect of language learning, requiring careful consideration of effective techniques and materials. The challenge lies in making the learning process engaging, especially for young learners. The proposed solution involves incorporating the Word Search Puzzle game, known for its potential to captivate students' interest and facilitate active learning. By addressing the issue of boredom in vocabulary learning, this game aims to enhance students' language skills and encourage participation (Susanto, 2018).

Vocabulary, comprising verbs and nouns, is a fundamental element in language learning. Recognizing the significance of mastering vocabulary for effective communication, the study focuses on the present continuous tense structure, utilizing the Word Search Puzzle game to reinforce learning. This innovative approach aligns with the broader goal of improving students' vocabulary and language proficiency.

The Word Search Puzzle game, with its interactive and challenging nature, not only increases vocabulary but also contributes to a more dynamic and participatory learning environment. Recognizing the potential benefits of this game, including creativity, increased

activity, improved critical thinking, and a conducive classroom atmosphere (Wirahyuni, 2017), the study aims to explore its effectiveness in the context of SMPN 03 Kamal Bangkalan.

In conclusion, this research seeks to investigate the effectiveness of the Word Search Puzzle game as a media tool to enhance vocabulary among first-grade students. By addressing the challenges associated with vocabulary learning, the study endeavours to contribute valuable insights for educators and students alike. The Word Search Puzzle game, with its potential to make learning enjoyable and effective, stands as a promising solution to engage students in the language learning process.

**METHOD**

This study employed a quantitative approach with a pre-experimental design. The choice of a pre-experimental design is suitable for assessing the effectiveness of the Word Search Puzzle Game as a vocabulary teaching media, considering the manageable population of 20 first-grade students at SMPN 03 Kamal. This method aimed to determine whether there is effectiveness to increase students' vocabulary after using the Word Search Puzzle Game. The research design used a one group pretest-posttest design. The comparison between the pretest and posttest scores determines the success of the treatment. This section was used when implementing the Word Search Puzzle Game as a Vocabulary Teaching Media. This analysis was done by giving a Word Search Puzzle test to students.

Following the implementation of the Word Search Puzzle as a Vocabulary Teaching Media, the Post-test was utilized for comparison. This test targeted first-grade students at SMPN 03 Kamal, specifically all students in one class totaling 20 students. In this segment, the researcher analyzed the results and discerned variances in vocabulary mastery when employing Word Search Puzzles as a Teaching Media. This involved a comparison of students' comprehension before and after the implementation.

**Table 1: Design One Group Pretest Posttest Pretest**

| Pre test | Treatment (X) | Post test |
|----------|---------------|-----------|
| $O_1$ | Twice times | $O_2$ |

Note:

X: Treatments by using media in teaching and learning

O1: Pre test before treatment

O2: Post test after treatment

In this study, the researchers employed both Pre-test and Post-test procedures:

1. Pre-test: The researcher assigned tasks to students to assess their vocabulary mastery before the pre-experimental phase. During the initial session, students engaged in assignments using the Word Search Puzzle Game, focusing on verbs, nouns, adjectives, and adverbs. This assignment spanned approximately 90 minutes.

2. Treatment: This phase, spanning two days with sessions lasting 2x45 minutes each, held paramount importance in the study. The topic varied in each meeting.

    a. First meeting during the treatment: Researchers prompted students to identify nouns and verbs they knew. Subsequently, the researcher provided a brief explanation of nouns and verbs to enhance student understanding. Following this, students participated in the Word Search Puzzle Game, forming groups to play. Each class comprised four groups. The researcher delivered instructions and game play details, with students expected to sit together within their respective groups. The first group initiated the search for words in the Word Search Puzzle Game grid. If unsuccessful, the next group continued the search. This process continued until all words were found. For groups struggling to find words, they were assigned to translate the identified words alternately. Additionally, students received homework related to nouns and verbs to reinforce their understanding.

    b. Second meeting during the treatment: This session involved a brief discussion of nouns and verbs from the previous meeting, including a review of the assigned homework. The researcher then explained adverbs and adjectives, asking students to provide examples. Subsequently, students engaged in the Word Search Puzzle Game once again, this time focusing on adverbs and adjectives. Homework was assigned to reinforce the examples of adverbs and adjectives.

3. Post-test: Following the completion of the pre-experimental phase or treatment, the researcher assigned tasks again in a post-test. During this session, students received similar assignments, utilizing the Word Search Puzzle Game. The topics were the same, but the content differed, and the task was conducted over approximately 90 minutes.

In this research, the quantitative analysis technique employed involved the use of the SPSS application. SPSS is a software tool designed for managing and processing data, allowing researchers to input and analyze data obtained during the research process.

Specifically, SPSS version 22 was utilized, known for its user-friendly interface and effectiveness in processing statistical data.

## FINDINGS AND DISCUSSION

### Findings

The assessment of students' vocabulary mastery before and after teaching, using the Word Search Puzzle Game, involved a comparison of results. The researcher utilized the percentage formula and categorized the test into three assessment classifications: bad, good, and fair. This categorization aimed to evaluate students' vocabulary proficiency through pre-test and post-test measures.

**Table 2: Presentation of the results before and after teaching the wordsearch puzzle game**

| Class Intervals/Students Score | Pre-test | Post-test |
|---|---|---|
| Good/very good(80-100) | 10% | 60% |
| Enough/ fair (60- 79) | 50% | 35% |
| Bad/low (40-59) | 40% | 5% |

The table analysis indicates a significant improvement in students' vocabulary mastery. In the bad/low classification, no students scored low, and in the enough/fair classification, there is an increase from 15% to 35%. Furthermore, a clear and substantial increase is observed in the good/very good assessment criteria, reaching 65%. It can be concluded that the utilization of the word search puzzle game as a media tool is effective in enhancing students' vocabulary mastery. Moving on to the statistical test calculations, the researcher employed a paired sample t-test using the SPSS version 22 application to ascertain the results of data analysis and confirm the effectiveness of using word search puzzle games in vocabulary acquisition.

The output from the paired sample t-test in SPSS version 22 indicates an average pretest and posttest value of -23.000, a standard deviation of 7.327, and a standard error mean of 1.638. The lower difference interval is determined as -26.429, and the upper difference interval is -19.571. The T-test results in a value of 14.038 with a degree of freedom (df) of 19 and a significance level of 0.000. The results can be drawn in the following table.

**Table 3: Paired sample T-test**

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | Lower | Upper | | | |
| Pair 1 Pretest - Posttest | -23.000 | 7.327 | 1.638 | -26.429 | -19.571 | -14.038 | 19 | .000 |

The results of the analysis of the data that had been calculated concluded that the t-test results, calculated through SPSS 22, showed that the mean at the pretest was 50.25, along with a standard deviation value of 12.191. The SPSS computerized results, as well as the results of the posttest, indicated a mean of 78.25 with a standard deviation value of 8.472. Therefore, from these results, it could be concluded that the mean posttest (78.25) > mean (50.25), signifying that the word search puzzle game had a significant effect or result in learning and teaching vocabulary activities.

From the results of the paired sample t-test via SPSS 22, it is also known that the t-test value was 14.000, with a probability significance value of 0.000 and a t-table value of 2.093. So, the value of the t-test calculation (14.000) > t-table (2.093) with a significance probability of 0.000 < 0.05. It could be concluded that H1, which had a statement that there is a significant influence on the use of word search puzzle games on increasing student vocabulary, was acceptable. Whereas H0, which had a statement that there is no significant effect of the use of word search puzzle game media on the effect of increasing student vocabulary, was rejected.

## Discussion

The findings of this study underscore the significant impact of employing word search puzzle game media on enhancing students' vocabulary mastery. Through rigorous calculations, it is evident that this media proves to be effective in facilitating vocabulary learning among tenth-grade students at SMPN 03 Kamal, Bangkalan. The gamified nature of the word search puzzle game captures students' attention by prompting them to uncover hidden words within the game's table column. Consequently, this interactive and engaging approach not only enriches vocabulary but also aids in memory retention.

The word search puzzle game's effectiveness is attributed to its inherent characteristics, where carefully arranged and concealed words create an environment that captivates students' interest. This medium not only adds an enjoyable dimension to the learning process but also instills enthusiasm among tenth-grade students at SMPN 03 Kamal, Bangkalan. In short, the word search puzzle game emerges as a popular and effective medium for augmenting vocabulary, making it well-suited for enhancing learning activities at SMPN 03 Kamal Bangkalan.

The challenging aspects of the word search puzzle game contribute to students' creativity and their ability to remember hidden words. The repeated engagement with various word variations enhances the fun quotient of the game, creating a sense of pleasure and addiction among students. Beyond the enjoyment, the game serves as a cognitive training tool, aiding students with challenges such as delayed memory and poor retention, as suggested by Wijaksono & Siddik (2022).

As Ningsih (2021) stated that the word search puzzle game emerges as an effective tool or medium for teaching various aspects such as terminology, definitions, spelling words, and the exploration of concepts or key points with related words within the game. This approach leads to increased retention and memorization of related facts. The word search puzzle game stands out as a medium with evident effectiveness in imparting terminology, resulting in enhanced retention and factual memorization.

Additionally, playing word search puzzle games provides students with an opportunity to engage in imaginative thinking, contributing to the development of their creativity. This creative engagement is closely tied to the enhancement of students' cognitive abilities. By utilizing the words provided in the game, students can train their brains to think more imaginatively. This, in turn, stimulates the development of creativity among students when actively participating in the word search puzzle game, as highlighted by Maharani (2021). The word search puzzle game thus proves to be effective as a medium for increasing students' vocabularies at SMPN 03 Kamal Bangkalan.

## CONCLUSION AND SUGGESTION

Based on the findings, it can be concluded that there was effectiveness in using the word search puzzle game as a teaching media for vocabulary to the First Grade Students of SMPN 03 Kamal Bangkalan. The research findings indicate that word search puzzle games have the potential to enhance and motivate students' vocabulary skills. In light of this discovery, teachers can play a pivotal role in helping students expand their vocabulary

through the incorporation of word search puzzle games into their teaching methodologies. To maximize the effectiveness of these games, teachers are advised to manage their time efficiently during classroom sessions. This can be achieved by developing a well-structured lesson plan that outlines specific objectives for each session and anticipates potential challenges that may arise. Furthermore, teachers can enhance students' understanding by providing a comprehensive explanation of the word search puzzle itself. It is recommended that students dedicate time to diligent study and increase their practice with English vocabulary to further bolster their vocabulary mastery through the engaging medium of word search puzzle games.

## ACKNOWLEDGEMENTS

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