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## The Effect Of The Use Of Crossword Puzzle Media On Students' Vocabulary Mastery

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### ABSTRACT

The kids' vocabulary prevented them from fully mastering the four pillars of English language proficiency. As a result, it was decided to investigate "The Effect of Crossword Media on Students' Vocabulary Acquisition and Oral Communication." To improve their English, students can look into ways to expand their vocabulary and practice public speaking. After giving some thought to a number of potential approaches to the classroom, the author settled on using crossword puzzles as a means of fostering student growth in these areas. The objectives of this study were to: (1) give a general overview of how crossword puzzles can aid in vocabulary development and retention; (2) offer suggestions for future research; and (3) describe how crossword puzzle-containing media influences students' capacity to learn new words. After information was gathered via a questionnaire, quantitative data analysis was done. A representative sample of SMPIT Bait Et-Tauhied students participated in the study. We sent a questionnaire with 20 distinct sets of statements to 30 students in order to conduct the study. The results demonstrate that a crossword puzzle significantly affects students' understanding and use of vocabulary because the validity test of the test with the calculated R value is greater than the R table, demonstrating the validity of the 20 questions completed by the respondents. Additionally, the reliability test using Cronbach alpha demonstrates very reliability, and the case processing summary demonstrates that the number of respondents when filling out the questionnaire is not lost or broken.

## 1. Introduction

Learning a new language's vocabulary is a crucial first step. The ability to speak and write clearly and efficiently depends on one's vocabulary, and without one, one is limited in both (Lindawati, 2019). Understanding the part that students play

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in furthering their own vocabulary development is crucial. Students need to develop their own learning approach for a language because it is impossible to pick up fluency in a new tongue without additional time spent studying it outside of class. Furthermore, extracurricular activities help pupils in their efforts to expand their vocabulary. Students need to put their knowledge into practice and select efficient study strategies (Holidazia & Rodliyah, 2020).

Mastery of vocabulary is the primary factor in the actualization of thoughts and concepts. Mastering one's vocabulary is essential for communicating effectively in a variety of contexts, from academic study to interpersonal interactions (Deviyanti et al., 2022). Someone's vocabulary consists of the words in his or her lexicon that can be utilized to form new expressions. For this reason, it's crucial that children start developing their vocabulary early on in school (Fa Biola & Patintingang, 2021). Vocabulary acquisition is the single most crucial aspect of language acquisition; without it, the aim of language learning will not be attained, as a speaker's linguistic competence declines in direct proportion to the size of his or her vocabulary. If you want to be able to communicate effectively in speech, writing, and through signs and cues, then you need to develop a robust vocabulary.

English competence (knowing grammar and vocabulary) which takes a lot of priority and takes so much time is not matched by speaking exercises to improve oral production as a communicative performance. Students must choose the right vocabulary to describe the item, to repeat or emphasize words to clarify the description if the listener or recipient cannot understand it. Vocabulary is one of the elements of language that is considered necessary for language acquisition. Linguistic studies show that vocabulary is more important than structure because a thought is mainly conveyed by a word. After mastering vocabulary, students are expected to be able to communicate fluently. Vocabulary has been viewed as a core component of language proficiency (Suryadi et al., 2020).

In the process of learning English, students develop their talents in four areas: listening, speaking, reading, and writing (writing). The learning of vocabulary, pronunciation, spelling, and grammar are all interconnected. Morphology, phonetics, and syntax are other aspects of language. Vocabulary is a foundational component of all four linguistic abilities, making its early acquisition and mastery by children of paramount importance. Vocabulary is arguably the most crucial aspect of the four language skills, alongside grammar. Students of English develop their linguistic competence in four areas: listening, speaking, reading, and writing (writing). Vocabulary, pronunciation, spelling, grammar, phonology, morphology, syntax, and discourse are all facets of the language that contribute to the development of the aforementioned four skills through repeated exposure and study. Vocabulary is a foundational talent for the other four language abilities, therefore it's crucial that kids start learning and using it as early as possible. Vocabulary is one of the four building blocks of language, along with grammar, pronunciation, and reading comprehension (Tri Widyahening & Sufa, 2021).

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Because games provide an enjoyable activity that combines rules, goals, and of course, a sense of accomplishment, they are commonly utilized as a learning medium to immerse young children in the process of learning English (Tri Widyahening & Sufa, 2021).

Everyone has an innate desire to play. Playing games is a great way to have fun and relieve stress. In its most basic sense, play is any situation in which a person actively seeks out and participates in an activity or activities with the purpose of gaining pleasure or fulfillment. Students learn a wide range of skills through their play, which includes feeling delight, fulfillment, enthusiasm, and important experiences (Sudrajat & Herlina, 2015). Because of these realities, educators must adopt novel approaches to education, particularly in regards to enhancing pupils' vocabulary. If pupils aren't engaged in learning English, they won't learn the necessary vocabulary. Teachers should try different approaches to keep class from becoming routine. A crossword puzzle is one type of media that may be used to help students learn English. Students can increase their vocabulary knowledge through the usage of crossword puzzles, which are a form of game. Students can expand their vocabulary with the help of crossword puzzles. Existing research indicates that the use of Crossword Puzzles as a media component in education has not caught on as a viable option for helping students understand the subject and discover deeper meaning in their studies (Baharudin et al., 2022).

Combining brain-based learning models with cutting-edge media increases their efficacy. Media containing crossword puzzles is at issue here. The media crossword puzzle is a tool that might be used to execute a model of learning that relies on the brain. Using crossword puzzles in conjunction with brain-based learning models can lead to more engaging, engaging, and active learning for kids (Wiantara et al., 2020). Using crossword puzzles as a competitive game can encourage students to put in greater effort in determining the proper answers in order to win. As a result, learners need to commit to memory the necessary language in order to answer the questions and complete the puzzles. The purpose of this research is to identify effective strategies for incorporating crossword puzzles into the classroom in order to increase students' vocabulary retention (Lestari & Yulia, 2018).

When utilized in the classroom, crossword puzzles are both fun and instructive. Eclipse Crossword is the most convenient program for making crosswords out of a lexicon. Prospective educators can benefit from using the Eclipse Crossword application's Cross Puzzle as a learning medium in the classroom to foster critical thinking and inventive problem solving. Abilities in fluency, flexibility, originality, and attention to detail are the four key indications of creative thinking talents. Students' ability to think creatively and find novel solutions to problems is enhanced by working on and solving eclipse crosswords (Anggraeni & Sole, 2020).

Studies in every academic discipline have found that students benefit from using crossword puzzles as a kind of media to aid in their educational pursuits (Baharudin et al., 2022). The English language places a premium on vocabulary

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study. You might think of a person's vocabulary as their word stock. Communicating in a language is facilitated by familiarity with its vocabulary, which can be achieved through study of the grammar of the language (Sudrajat & Herlina, 2015). The kids' vocabulary prevented them from fully mastering the four pillars of English language proficiency. As a result, it was decided to investigate "The Effect of Crossword Media on Students' Vocabulary Acquisition and Oral Communication." To improve their English, students can look into ways to expand their vocabulary and practice public speaking. After giving some thought to a number of potential approaches to the classroom, the author settled on using crossword puzzles as a means of fostering student growth in these areas.

Increasing English Vocabulary Mastery via Crossword Puzzle Games at the Fourth Grade Level: A Study by (Nuriya et al., 2017) and Enhanced Singular And Plural Noun Flexibility Among Smp Class VIII Students Through Crossword And Puzzle Games (Elisa & Raja, 2021). As a result, I agree with the author that media containing crossword puzzles can be beneficial to kids' ability to learn. It is important to investigate whether the medium "CROSSWORD PUZZLE" can aid pupils in expanding their command of the English language by means of crossword puzzles.

Statement of the issue: (1) How helpful is the crossword game medium for increasing students' vocabulary? (2) How does playing Crossword Puzzles with students affect their ability to learn new words? The limitations of the problem as stated above are (1) it is limited in scope to considering how crossword puzzles might influence students' ability to learn new words. (2) Vocabulary exercises and media-themed crosswords are included. Based on the problem statement and its constraints, the researcher set the following goals for this study: (1) To detail how the media form of Crossword Puzzles can be used to improve students' vocabulary learning. (2) To explain how media containing crossword puzzles helps pupils learn new words.

## **2. Methodology**

The research in this study is primarily quantitative in nature. Sugiyono (2015) explains that positivist quantitative research is a method used to study populations or selected samples for the purpose of testing hypotheses. The researcher in this study used a random sampling technique that did not take into account the different layers (strata) of the population being studied. Simple random sampling is a technique used in Indonesia and it is a part of the language. As stated by (Saputra & Apriadi, 2018). Although the survey did not include 100% of the population, the results can be extrapolated to be representative of the entire population (Ulya et al., 2018). Data collection typically involves the use of questionnaires, with subsequent analyses being primarily quantitative. The students who took part in the study were a representative cross-section of the student body at SMPIT Bait Et-Tauhied. We sent out a questionnaire with 20 different sets of statements to 30 students. There were 102 students at the school, so they picked at random.

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### A. Validity test

The purpose of a validity test is to ascertain whether or not a given measuring device is suitable for its intended purpose. Whether or whether a test accurately measures its target construct is central to the concept of validity. The extent to which a test is able to uncover the true qualities or condition of the object being measured is a function of the test's validity (Zhang et al., 2014).

### B. Reliability test

$$r_{11} = \frac{k}{k-1} \times \left\{ 1 - \frac{\sum S_i^2}{S_t} \right\}$$

Description:

$r_{11}$  : Reability value

$\sum$  : Total variance score for each item

$S_t$  : Varians total

$k$  : Number of items

The overall correlational average for each split is calculated here. This evaluation can make use of instruments with questions that have more than two responses (Heale & Twycross, 2015). Cronbach's alpha depends on the number of items on the scale and the degree to which their means are correlated (Kimberlin & Winterstein, 2008). Item responses (answers to survey questions) are correlated with one another and this is what alpha assesses. Basically, what does is calculate an approximation of the proportion of systematic or consistent variance in a collection of survey responses (Vaske et al., 2017).

## 3. Results and Discussion

### Results

A Likert scale questionnaire was employed, which is a common tool for gauging people's reactions, opinions, and overall impressions of a situation. Twenty sentences from a questionnaire are used to gauge responses from thirty sixth-graders at Bait Et Tauhied. When the SPSS processing was complete. The following is a summary of the findings from the questionnaire's validity test of statement items:

Table 1. Likert Scale

Interval %	View from the author	
0 - 24,9 %	Totally disagree	If expanding one's English vocabulary through the use of crossword puzzles is as satisfying as it seems, it must be a good method.
25 - 49,9 %	Disagree	
50 - 74,9 %	Agree	
75 - 100 %	Strongly agree	

Table 2. Validity Test Result

Validity Test Result			
No	Rcount	rtable	Criteria
P1	0,531	0,349	Valid
P2	0,459	0,349	Valid
P3	0,377	0,349	Valid
P4	0,39	0,349	Valid
P5	0,366	0,349	Valid
P6	0,422	0,349	Valid
P7	0,371	0,349	Valid
P8	0,419	0,349	Valid
P9	0,458	0,349	Valid
P10	0,429	0,349	Valid
P11	0,364	0,349	Valid
P12	0,424	0,349	Valid
P13	0,411	0,349	Valid
P14	0,393	0,349	Valid
P15	0,413	0,349	Valid
P16	0,416	0,349	Valid
P17	0,425	0,349	Valid
P18	0,463	0,349	Valid
P19	0,442	0,349	Valid
P20	0,462	0,349	Valid

After that, SPSS was used to analyze the data. Reliability test data gathered by questionnaire are summarized below:

Table 3. Realibity Statistics

Reliability Statistics	
Cronbach's Alpha .755	N of Items 20

Table 4. Total Responden

Case Processing Summary			
		N	%
Cases	Valid	30	100.0
	Excluded <sup>a</sup>	0	.0
	Total	30	100.0

## Discussion

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(Table.1) The Likert Scale method, created by Rensis Likert, was used to perform computations on the responses to the questionnaire (1932). One common application of the Likert Scale is in questionnaires seeking respondents' ratings of a statement or set of reports (Layanan et al., n.d.).

(Table.2) The correlation coefficients ( $r_{\text{count}} = 0.371$  and  $r_{\text{table}} = 0.349$ ) can also be used to provide a response to the first study question, which concerns the impact of cross-world puzzle media on students' vocabulary development. Pearson's correlation is used to check the authenticity and dependability of our results. In this study, we use Pearson's correlation with a 5% level of significance to examine the association between the two variables. To be valid, an answer must have a significance value of 0.05 or less; otherwise, it is rejected. When a concept can be quantified reliably in a study, we say that the study has validity. A credible study would not, for instance, include a question about depression but instead evaluate anxiety. In quantitative research, instrument accuracy or reliability is a secondary quality indicator. In other words, how well a study instrument produces the same results every time it's utilized in the same setting. (Heale & Twycross, 2015). explains this further.

A test is considered dependable if it consistently produces the same results when administered to the same population on multiple occasions (Zhang et al., 2014).

(Table.3) Cronbach's alpha was used as a reliability measure for each variable in this study, and the values were calculated in the SPSS software. Cronbach's Alpha can be used to provide a general estimate of the items on a questionnaire on learning styles. The reliability of the learning style questionnaire is assessed in a single attempt, therefore a value of 0.60 or above on the Cronbach Alpha statistic indicates high reliability (Utami & Gafur, 2015). The Cronbach's alpha score of 0.755 found by the researchers demonstrates the study's dependability. Consequently, both the null hypothesis and the research hypothesis are debunked by the evidence.

In order to ascertain whether or not an instrument is reliable on its own, the Cronbach Alpha is typically applied. (Table.4) The results show that 30 students from SMPIT Bait Et-Tauhied participated, with a confidence level of 100% meaning that all data was gathered and processed without any missing values or processing mistakes.

#### **4. Conclusion**

Twenty statements are known to be legitimate and meet the conditions of the questionnaire validity test, specifically, the value of  $r_{\text{count}} > r_{\text{table}}$ . The validity and reliability tests conducted on the statement item list of the questionnaire allow one to draw the conclusion that the questionnaire's validity and reliability values are adequate for use in assessing students. The given research and debate leads us to the conclusion that crossword puzzles can have an impact on the vocabulary

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development of middle school children. Data collected from surveying pupils in the middle grades demonstrates this rise.

A number of suggestions were made for students, teachers, parents, and further researchers through this study: First, students would be able to give the highest possible attention to continue to get used to learning, especially in setting a schedule for learning activities, always repeating the lessons learned during the course of the study distance learning by self-study at home, and keep in touch with classmates or teachers about materials that are considered difficult. Second, teachers should stimulate students through additional material about the need to design time for learning activities to be more orderly, innovative and interactive in distributing assignments so that students are interested in doing them independently at home, and are willing to offer assistance if students find it difficult or there are obstacles in learning. Third, parents of students must be present to provide intensive assistance, paying great attention to the learning process of students. Fourth, it is deemed necessary to conduct further research by expanding the objects and variables, so that the findings in this study can be closer and stronger to touch specifically each student's learning difficulties.

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