# Using word search puzzle in improving students' English vocabulary: A systematic literature review

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#### **Abstract**

Recently, learning activities based on Word Search Puzzles have become a trend in teaching and learning. These activities are believed to increase students' vocabulary. This study reviews the use of Word Search Puzzles in improving students' vocabulary. The analysis includes 25 relevant papers that meet the required criteria, and the findings are summarized in the table. These papers answer four main QA (Question-Answer) regarding the effectiveness of Word Search Puzzles in enhancing the students' vocabulary. All 25 papers have a similar research focus, which is related to the effectiveness of Word Search Puzzles in improving/increasing/enhancing students' vocabulary. All papers use experimental research methods to know the effect of the comparison of two learning media by using Word Search Puzzle and other learning media. Two comparisons this learning media uses control class and experiment class. A comparison was made of the results of the improvement and mastery of students' vocabulary. It shows that Word Search Puzzle is effective in improving students' vocabulary mastery. This can be seen from the scores of the pretest to posttest in the control and experimental class. There is a significant difference between the experimental class's pre-band post-test mean scores. Further research is needed considering that Word Search Puzzles can be applied in all fields of science.

**Keywords:** crossword puzzle, English vocabulary, teaching vocabulary, vocabulary

#### 1. Introduction

Learning English is inseparable from learning vocabulary. Without understanding vocabulary, students cannot understand or use vocabulary related to certain material. This material is related to the four skills in learning English: listening, speaking, reading, and writing. However, in reality, many students are less interested in learning vocabulary seriously. The students often encounter obstacles when trying to understand and retain new words. One significant factor contributing to these challenges is the continued use of conventional teaching methods, where teachers primarily rely on delivering lectures and presenting students with lists of vocabulary to memorize.

Vocabulary mastery is an activity of mastering or the ability to understand and use words contained in spoken and written language. Vocabulary mastery is very necessary because the more vocabulary a person has, the easier it is for him/her to convey and receive information, even vocabulary can be used as a measure of someone's intelligence. The vocabulary itself means vocabulary or word richness that is used as a benchmark for language skills. It implies the ability to comprehend the meaning, nuances, and connotations of the words chosen and to use them appropriately to convey the intended message effectively. The vocabulary mastered by students is seen based on the mastery of synonyms, antonyms, and the meaning of terms.

Mastery of vocabulary is essential for learning English. It is because gaining a sufficient vocabulary is a fundamental criterion for English mastery, and the role of a teacher in assisting students in achieving their goals is important (Pratolo & Hafizhah, 2022). According to Imbenay & Katemba (2022), vocabulary is one of several sub-skills that are crucial to learning a language to construct sentences, communicate, and improve the four abilities to listen, speak read, and write. A lack of vocabulary is one factor that might contribute to students' laziness when learning a language, especially English.

The learning media chosen and used by the teacher have a starting point from the learning objectives. The teacher must be able to determine the learning media to be used to support active learning. One interesting learning media that can be used to improve vocabulary mastery is crossword puzzles. The learning model with Word Search Puzzle was first initiated by Arthur Wynne, the inventor of crossword puzzles, on November 6, 2011. In Indonesian, Word Search puzzles are crossword puzzles). Crossword is a Classic Puzzle that continues to be one of the most popular Puzzle types (Jomjai, 2020; Wingkamon, 2020).

In crossword puzzles, several questions or words/phrases are provided as keys to fill in a series of blank boxes that are designed in such a way (Fitria, 2022). In the Crossword Puzzle game, there is a game with a rectangular template consisting of black and white colored boxes equipped with 2 lanes, namely horizontal (a collection of boxes that are one row and several columns) and descending (a group of boxes with one column and one column). several lines). A crossword puzzle consists of squares that must be filled with words or numbers, one letter or number per square. Words' synonyms or definitions are indicated by numbers corresponding in the squares (Dhand, 1990).

According to Ehlers (2002), a crossword puzzle can easily be designed to test knowledge. Word Search puzzles are a challenging and fun way for children (Sibtain, 2004). Word Search puzzles are a challenging and fun way for children to learn spelling, vocabulary, synonyms, and grammar. Word Search Puzzle can be done individually or in groups. Group games will improve children's social interactions and can also improve

students' skills and understanding, especially in conceptual material. Word Search Puzzle can trigger thinking activities so that the conditions that occur when completing Word Search Puzzle are relaxed and happy and students keep learning. Even though Word Search Puzzle is a form of the game, these games are educational because apart from being fun they will also hone skills.

Marsono (2021) states that when students are engaged in solving Word Search Puzzles, they might not always find it easy to determine the answers to the given questions or challenges presented in the puzzles. There are times when the answer can be found easily, he may get in the way of adversity. This can be used as an advantage if they see it as observant. Because during difficulties, students find answers that must be filled into the row of boxes provided. In fact, without realizing it, students are learning to control their emotions and be patient in accepting something to be desired. Over time, students will gradually come to realize that achieving desired outcomes is not always easy; sometimes, it requires hard effort. This process allows students to learn how to solve problems in their unique ways.

Crossword puzzle learning strategies aim to foster and develop thinking skills, especially in the cognitive domain. This strategy combines playing with learning. Through this game, students will enjoy the learning process more. Including games in learning strategy is an important thing to consider. Considering that games are very interesting things for students. In the crossword puzzle strategy, students will look for answers to the questions that have been provided. This strategy makes students active, and learning becomes fun. Students will feel happy learning when there are challenges, namely by using games. In addition, answering one of the questions will provoke students to be able to answer other questions because they are helped by one or more letters from the previous answer so they will be more motivated in learning. Based on the explanations above, the researcher is interested to know about the use of Word Search Puzzles in improving students' vocabulary mastery. Therefore, the objective of this research is to review the effectiveness of Word Search Puzzles in improving students' vocabulary mastery.

#### 2. Method

The method used in this literature study was using the Systematic Literature Review method (SLR) or systematic review. The systematic review is a rigorous method of collating and synthesizing evidence from multiple studies, producing a whole greater than the sum of parts (Purssell & McCrae, 2020).

There are three stages carried out using the SLR method, namely planning, implementation, and writing of results (reporting) (Fitria, 2022).

# 2.1. Planning

Planning is the first step carried out in the SLR method, namely by determining. Research Questions (RQ) or questions created based on the needs and selected research topics (Wahono, 2015).

The following is a deep research question for this literature study:

- RQ1 Does the journal explain the effectiveness of Word Search Puzzlein in improving students' vocabulary?
- RQ2 Does the journal compare the students' average between two different classes both class control and experiment?

## 2.2. *Implementation (Conducting)*

At this stage, it contains the implementation that is made according to the following rules:

- a. Determining the source of the literature search such as Google Scholar, Semantic Scholar, ScienceDirect, Academia-Edu, and ResearchGate.
- b. Determining the keywords according to the topic of 'crossword puzzle" in teaching vocabulary.
- c. Choosing the appropriate literature by determining criteria so that it can be decided whether the data found fit for use or not.
- d. Evaluating the criteria that have been determined later based on quality assessment questions (Quality Assessment) to find out whether the journal has met the criteria and can answer Research Questions (RQ).

QA1	Is the journal published from 2017-2022?
QA2	Does the research focus on the use of Word Search Puzzles for Indonesian
	school/college students?
QA3	Do the findings explain the improvement of students' vocabulary using
	crossword puzzles?
QA4	Do the findings compare the improvement between two different classes in
	the control class and experiment class?

e. Giving codes to each journal based on their ability to answer each question on the Research Question (RQ) such as Yes (Y): Can answer questions on Research Question, and No (X): Does not answer the question on Research Question.

### 2.3. Reporting

Reporting is the final stage in the SLR method where secondary data that has been analyzed is later reported in written form that discusses the answers to the Research Question (RQ).

# 3. Findings and Discussion

The following is a Quality Assessment (QA) table for each question on the Research Question (RQ) as stated below:

Table 3.1. Quality Assessment

	Table 3.1. Quality Assessment					
No	Author and Year Publication		Question Answer			
	(W.1 ', 2012)	QA1	QA2	QA3	QA4	
1.	(Widarti, 2012)	X	Y	Y	X	
2.	(Sulistyowati et al., 2014)	X	Y	Y	X	
3.	(Pasaribu, 2014)	X	Y	Y	X	
4.	(Profita et al., 2014)	X	Y	Y	X	
5.	(Sari, 2014)	X	Y	Y	X	
6.	(Saraswati, 2014)	X	Y	Y	X	
7.	(Aji, 2016)	X	Y	Y	X	
8.	(Fitriyani, 2016)	X	Y	Y	X	
9.	(Handayani, 2016)	X	Y	Y	X	
10.	(Rahayu, 2016)	X	Y	Y	X	
11.	(Wiratama, 2017)	Y	Y	Y	Y	
12.	(Ihsan, 2017)	Y	Y	Y	X	
13.	(Nugroho & Suprapto, 2017)	Y	Y	Y	Y	
14.	(Pratiwi, 2017)	Y	Y	Y	X	
15.	(Modjanggo, 2020)	Y	Y	Y	X	
16.	(Sari, 2017)	Y	Y	Y	Y	
17.	(Putra, 2018)	Y	Y	Y	X	
18.	(Sari, 2018)	Y	Y	Y	X	
19.	(Santoso, 2018)	Y	Y	Y	X	
20.	(Manullang et al., 2018)	Y	Y	Y	X	
21.	(Rusmawan, 2018)	Y	Y	Y	X	
22.	(Oktaviani, 2018)	Y	Y	Y	Y	
23.	(Kasor, 2018)	Y	Y	Y	Y	
24.	(Rohmania, 2018)	Y	Y	Y	Y	
25.	(Ekayanti et al., 2019)	Y	Y	Y	Y	
26.	(Akhiroh, 2019)	Y	Y	Y	Y	
27.	(Ainiyah, 2019)	Y	Y	Y	Y	
28.	(Sadiyah et al., 2019)	Y	Y	Y	X	
29.	(Nurteteng & Nopitasari, 2019)	Y	Y	Y	X	
30.	(Kayanti, 2019)	Y	Y	Y	Y	
31.	(Jaya, 2020)	Y	Y	Y	X	
32.	(Sitompul & Harahap, 2020)	Y	Y	Y	Y	
33.	(Erlinda, 2020)	Y	Y	Y	<u> Y</u>	
34.	(Dila, 2020)	Y	Y	<u>Y</u>	Y	
35.	(Nenggani, 2020)	Y	Y	Y	Y	
36.	(Ningsih, 2021)	Y	<u>Y</u>	Y	<u>Y</u>	
50.	(1 111150111, 2021)	1	1			

37. (Rizqi & Usman, 2021)	Y	Y	Y	Y
38. (Wandira, 2021)	Y	Y	Y	Y
39. (Seran, 2021)	Y	Y	Y	X
40. (Panjaitan & Amaniarsih, 2021)	Y	Y	Y	X
41. (Yuliana, 2021)	Y	Y	Y	Y
42. (Lubis, 2021)	Y	Y	Y	Y
43. (Kahar, 2022)	Y	Y	Y	X
44. (Tegu & Hadiwijaya, 2022)	Y	Y	Y	X
45. (Sikdewa, 2022)	Y	Y	Y	Y
46. (Haitami, 2022)	Y	Y	Y	Y
47. (Saban et al., 2022)	Y	Y	Y	Y
48. (Rochmadhoni, 2022)	Y	Y	Y	X
49. (Asrul et al., 2022)	Y	Y	Y	Y
50. (Situmeang, 2022)	Y	Y	Y	Y

Based on the table above, the researcher finds 50 previous researches related to the use of Word Search Puzzle in improving students' vocabulary. The researcher looks for the keywords "crossword puzzle" and "crossword puzzle on students' motivation" on Google Scholar as stated in the method. The researcher finds 50 papers (articles and journals) related to those keywords. In assessing the quality of the journal, the researcher focuses on the QA (Question-Answer) as stated in the method.

The researcher finds that 25 papers do not qualify to be analyzed in this research. 11 papers cannot be used because the data (journals) do not answer QA1 (articles published in 2018-2022) and QA4 (findings do not compare the improvement between two different classes in the control class and experiment class). There are 14 papers cannot be used because the data (journals) do not answer QA4 QA4 (findings do not compare the improvement between two different classes in the control class and experiment class). Besides, 25 papers can be used as data because they meet the requirements which are then analyzed and summarized in the table. These papers can answer QA1 (papers published from 2017-2022). QA2 (the subject of the research focus on the use of Word Search Puzzle for Indonesian school/college students), QA3 (research findings explain the improvement of students' vocabulary using crossword puzzles), and QA4 (research findings compare the improvement between two different classes in control class and experiment class).

# 3.1. RQ1: Does the journal explain the effectiveness of Word Search Puzzlein in improving students' vocabulary?

To know the research focus on the previous research, the researcher describes it in a table to make it easier to understand. Based on 25 papers (data), papers (research articles) have the same focus to know, describe, find out, obtain, get, see, and determine the effectiveness of Word Search Puzzle in improving/increasing/enhancing students'

vocabulary. All of the papers (data) use experimental research methods. The researcher wants to know the effect of the comparison of two learning media, namely using Word Search Puzzles and other learning media. Two comparisons this learning media uses two groups of students (control class and experiment class) with the application of different learning media of the two-learning media Then a comparison was made of the results of the improvement and mastery of students' vocabulary.

Table 3.2. Analysis of Secondary Data Sources

No	Researcher	Research Focus				
1.	(Wiratama,	To determine the effectiveness of Word Search Puzzlein in increasing				
	2017)	students' vocabulary mastery. This research was conducted on class				
		VII students of SMPN 13 Mataram for the 2017-2018 academic year.				
2.	(Nugroho &	To describe the difference in students' vocabulary mastery between				
	Suprapto,	those by using Picture Crossword Puzzle Game and conventional				
	2017)	method (translation)				
3.	(Sari, 2017)	To obtain empirical evidence regarding the effect of Word Search				
		Puzzle students' vocabulary mastery. This research was conducted on				
		second-grade students of SMP Puspita Bangsa Ciputat				
4.	(Oktaviani,	To find out the empirical data concerning whether Crossword Puzzle is				
	2018)	effective on students' vocabulary mastery.				
5.	(Kasor, 2018)	To know whether there was an influence of using Word Search				
		Puzzleon students" vocabulary mastery in the second semester of the				
		seventh grade of SMPN 24 Bandar Lampung in the academic year of				
	(D. 1	2017/2018				
6.	(Rohmania,	To find out the effectiveness of Word Search Puzzlein improving the				
	2018)	students' vocabulary mastery of the seventh graders of SMP N 1				
	(Elvarianti at	Batealit Jepara				
7.	(Ekayanti et al., 2019)	To get empirical evidence about using Crossword Puzzle to improve students' vocabulary mastery.				
8.	(Akhiroh,	To see whether or not the combination of Numbered Head Together				
0.	2019)	(NHT) and Word Search Puzzlemethod is effective in improving				
	2017)	students' vocabulary at SMPN 01 Batealit Jepara				
9.	(Ainiyah,	To know the improvement of Object Word Search Puzzletowards				
	2019)	students' vocabulary mastery and students' motivation at MTsN-2				
	,	Palangka Raya				
10.	(Kayanti,	To get empirical evidence about the use of Crossword Puzzle in				
	2019)	improving students' vocabulary mastery at The Seventh Grade				
		Students of SMP N 2 Pringgasela in Academic Year 2018/2019				
11.	(Modjanggo,	To find out whether crossword puzzle is effective in improving				
	2020)	students' vocabulary mastery in the eight grade students of SMP				
		GKST I Tentena				
12.	(Sitompul &	To find out if is there any significance of puzzle games on students'				
	Harahap,	vocabulary achievement for non-English department students.				
	2020)					

13.	(Erlinda, 2020)	To find out whether crossword puzzle game is an effective strategy to improve students' vocabulary mastery of the descriptive text, and compare with the students who were taught by using the conventional
		method.
14.	(Dila, 2020)	To find out the influence of using a Crossword Puzzle Game on
		English vocabulary mastery of the Tenth Grade students at SMA Negeri 4 Palu
15.	(Nenggani,	To obtain data and information regarding students' German vocabulary
	2020)	mastery by using Word Search Puzzles media
16.	(Ningsih,	To find the use of word search puzzles in teaching English vocabulary
	2021)	to fifth-grade students at SD Islam Khalifah Palu
17.	(Rizqi &	To find out whether Crossword Puzzle Game effectively increases the
	Usman, 2021)	vocabulary of the eighth-grade students at SMPN 1 Ampibabo.
18.	(Wandira,	To find out whether or not the use of Word Search Puzzle improves
	2021)	students' reading comprehension in descriptive text in the first
		semester of 8th grade at SMPN 5 Palopo in the 2020/2021 academic
		year.
19.	(Yuliana, 2021)	To find out the effectiveness of using deep Word Search Puzzleto to improve vocabulary mastery in class X IPA at MAN 2 Sinjai.
20.	(Lubis, 2021)	To the effect of word search puzzle game to vocabulary mastery at the
		VIII Grade Students of SMP N 5 Padangsidimpuan.
21.	(Sikdewa,	To determine whether Word Search Puzzlecan increase students
	2022)	vocabulary of class VII students of SMPN 16 Makassar
22.	(Haitami,	To know the crossword puzzle learning strategy effectively to improve
	2022)	the mastery of English vocabulary at seventh grade SMP N 1
		Sukosewu in academic years 2021/2022
23.	(Saban et al.,	To increase students' verb mastery through "puzzle" game to the
	2022)	second grade at SMA Negeri 4 Halmahera Utara
24.	(Asrul et al.,	To determine the significance of using the Word Search Puzzles in
	2022)	developing students' vocabulary at Pangeran Antasari Medan's seventh
		grade.
25.	(Situmeang,	To find out the effect of using wordscapes (word puzzle) application
	2022)	on students' vocabulary mastery in the eighth grade of SMP GKPI
		Padang Bulan.

# 3.2. RQ2: Does the journal compare the students' average between two different classes both class control and experiment?

In the experimental research concept, the researcher (previous research) held a pretest before giving the treatment. Thus the results of the treatment can be known more accurately. The results of the pretest become early steps in providing treatment for the final test. Previously, there was a stipulation on whether a group to be targeted or not. The experimental class is the class that gets treatment (using crossword puzzle media), while the control class is the group that does not get treatment (medium other than non-crossword

puzzle). To know the research findings that state the effect (impact/influence) of the crossword puzzle on students' vocabulary, the researcher describes the research findings in the table below:

**Table 3.3.** Using Crossword Puzzle in Improving Students' Vocabulary

No Research Improvement of Students' Voca					
		<b>Control Class</b>		Experim	ent Class
		Pretest Post-		<b>Pretest</b>	Posttest
			test		
1.	(Wiratama, 2017)	59.50	67.33	59.16	79.33
2.	(Nugroho & Suprapto,	68.44	81.25	68.44	90.94
	2017)				
3.	(Sari, 2017)	56.43	72.71	59.85	65.29
4.	(Oktaviani, 2018)	62.14	71.40	61.62	81.22
5.	(Kasor, 2018)	66.21	74.86	62.67	76.17
6.	(Rohmania, 2018)	61.60	67.00	59.60	74.50
7.	(Ekayanti et al., 2019)	55.45	74.00	48.70	79.65
8.	(Akhiroh, 2019)	72.14	74.28	70.10	77.40
9.	(Ainiyah, 2019)	56.00	56.56	56.00	70.00
10.	(Kayanti, 2019)	55.45	74.00	48.70	79.65
11.	(Modjanggo, 2020)	58.11	78.47	65.11	91.94
12.	(Sitompul & Harahap,	58.50	64.17	62.83	76.83
	2020)				
13.	(Erlinda, 2020)	60.80	73.20	63.70	80.10
14.	(Dila, 2020)	83.84	88.08	89.92	95.38
15.	(Nenggani, 2020)	72.20	78.50	78.60	88.40
16.	(Ningsih, 2021)	48.50	59.50	60.00	79.50
17.	(Rizqi & Usman, 2021)	57.80	64.00	51.00	72.60
18.	(Wandira, 2021)	40.00	49.00	32.00	71.00
19.	(Yuliana, 2021)	44.94	55.38	45.56	73.44
20.	(Lubis, 2021)	55.12	58.37	60.12	74.71
21.	(Sikdewa, 2022)	59.95	66.86	76.47	88.13
22.	(Haitami, 2022)	32.13	71.74	42.75	86.75
23.	(Saban et al., 2022)	63.00	66.00	62.50	72.70
24.	(Asrul et al., 2022)	60.84	65.04	64.68	79.04
25.	(Situmeang, 2022)	58.50	69.25	59.75	76.75

The results table above shows that Word Search Puzzle is effective in increasing students' vocabulary mastery. This can be seen from the increasing/improvement scores from the pretest to the posttest both in the control class and experimental class. There is a significant difference between the experimental class's pre- and post-test mean scores. The result suggests that the mean of the posttest and after treatment with crossword puzzle games was higher than the mean of the pretest, indicating that utilizing crossword puzzle

games affects English vocabulary knowledge. So, Word Search Puzzles as learning media product is effective in improving or increasing the student's vocabulary mastery (Ramadhania & Adnan, 2022).

The pretest values for the control class and the experimental class were very varied and showed different results. We can see from Dila's (2020) research, both the pretest scores for the control class and the experimental class showed a high score above 80. But, the increase in scores from the pretest and posttest is not quite high. The posttest score for the control class was above 80, while the posttest score for the experimental class was above 90.

Other findings also show that from Nugroho & Suprapto's (2017) study, both the pretest scores for the control class and the experimental class showed the same score. Both the pretest scores for the control class and the experimental class showed a high score above 60. In addition, the increase scores from the pretest and posttest is also quite high. The posttest score for the control class was above 80, while the posttest score for the experimental class was above 90. He adds that both treatments are successful in teaching vocabulary. It implies that there is no unsuccessful technique. It may be inferred that image Word Search puzzles are an effective way to teach vocabulary. Modjanggo's (2020) research also shows a high improvement in the pretest score from above 65, and the posttest score is above 90. Then, Wandira (2021) finds that in the experiment class, there is a high improvement score from the pretest score above 30, and the pretest score above 70. This posttest score was considered very high among the other posttest scores.

Word Search Puzzle involves active student participation from the time learning activities begin. Students are invited to participate in all learning processes, not only mentally but also physically involved. With this, students will feel a more pleasant atmosphere so that learning outcomes can be maximized. In addition, Word Search Puzzle can also be used as a learning strategy to review the material that has been presented. This review is useful to make it easier for students to recall what material has been delivered. In developing and implementing the crossword puzzle model, in practice, the teacher always provides guidance and direction on various occasions so that there is no commotion in the class.

Motivating students is an important part of fostering students' self-awareness of the seriousness of the teaching and learning process, especially in enrichment material in English vocabulary. In addition to the teacher's creativity, the material can be linked to the learning faced by students. The useful function of the crossword puzzle itself is to build brain nerves which have the effect of refreshing memory so that the brain's work function returns to its optimum because the brain is accustomed to continuous learning in a relaxed manner. Because learning in a relaxed manner can make students understand more and

easily get into students' memories so that students don't easily forget the material that has been taught.

The crossword puzzle will be interesting because the technique is that every time we get an answer, whether it's from a horizontal or descending question/quiz, a hint will automatically appear for another question/quiz that intersects with that answer. This arouses the curiosity of students and increases their motivation to complete the puzzle. Word Search Puzzle in the form of vocabulary range from simple words in the form of "adjectives" or adjectives of people, animals, or objects, to noun phrases or noun phrases which are combinations of adjectives with nouns. This game can be said to be like a puzzle putting together words according to the instructions that have been made, and instructions and questions can also be changed according to student needs.

This method is to foster students' curiosity in learning about "vocabulary". Because learning now does not prioritize memorization but stimulates children to learn independently so that they will automatically memorize it by themselves. The crossword puzzle can be made varies from the easiest to more difficult/complicated. Each student will feel challenged at their level. Groups of students with different characteristics may be given different materials, adapted to the situation, conditions, and potential of students in each school. The benefits include honing students' cognitive skills (ability to know and remember), honing students' motor skills (ability to coordinate body parts such as hands and feet), and the ability to think properly and orderly.

According to Rabi'ah (2018), it is essential to have a large vocabulary when studying English. One of the criteria that define the effectiveness of four English Skills is vocabulary. Students with a large vocabulary may find it easier to learn English. Therefore, the teacher should employ an effective method for teaching vocabulary. The teacher should employ the crossword strategy because it is one of the most intriguing, enjoyable, and entertaining activities. The crossword puzzle method is very beneficial for enhancing students' vocabulary. By adopting the crossword strategy, students do not feel as if they are memorization vocabulary; they may add vocabulary unconsciously.

In teaching vocabulary with crossword puzzles, there are several types of Word Search puzzles that students can complete. First, an oral crossword puzzle. The oral crossword is a crossword whose clues are supplied orally by the teacher, while the students receive only the crossword grid. We give the students only the puzzle without any hints. We provide the hints orally. This is a wonderful listening assignment for a foreign language classroom. We tell students to fill in as much as they can, then repeat the hints at the conclusion. Second is picture crossword. Picture crossword is a crossword in which the clues consist of pictures. It only provides the students with the puzzle without any hints. For each hint, it displays one image. This is especially useful for units that introduce a great deal of new

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terminology. Third is object crossword. Object crosswords are crosswords in which the clues are inscribed on the objects themselves. The teacher can give students only the puzzle with no hints. We place the items about the room and labeling each with its corresponding number. We rotate students throughout the room to different stations; allow them to collect the puzzle pieces as they progress. This tactile version of the puzzle is ideal for students who prefer to learn by doing. This style of puzzle is effective for vocabulary-rich lessons.

The teacher might give Word Search Puzzle in many ways. The method of presenting Word Search Puzzle must piques the students' interest in completing them. Lee (2016) describes numerous crossword puzzle strategies, such as the first, the teacher gives each student the same crossword puzzle individually, and with the aid of textual hints. The second, the teacher divides students into groups. The teacher then assigns a unique crossword to each group. Everyone in the group contributes to the solution. However, if there is a more active member in a group, that individual will typically do all the work. If there is a more passive individual in a group, it will be difficult for them to do all of the work. In the third strategy, the teacher hands each student a crossword problem. They complete the crossword independently. The teacher then splits the class into groups, in which they work. The students may share their completed crossword solutions with their group. The fourth is writing the crossword on the board but providing no written hints. The teacher provides clues orally and solves the puzzle with the class step-by-step. The class is divided into groups, and each group writes the words individually on the board.

In addition, the teacher might be inventive while giving crossword puzzles. For instance, the teacher may divide the class into groups. The teacher then provides each group with the same crossword puzzle. The group that completed the task in the shortest amount of time with all correct answers will be awarded a point. It can be more engaging if the winner receives a prize. In addition, Word Search Puzzle includes crosswords and hints. Word Search Puzzle are completed with the help of hints. Here are three types of clues, including a picture, a definition, and a Sentence Completion clue.

The crossword puzzle media can be made by educators themselves and adapted to the material. For this reason, the creativity of educators is needed to make it. By making their Word Search Puzzle it will be easier for educators to correct student work, as well as for educators' creativity to increase. In addition, the content of Word Search Puzzle must follow the material that educators teach. This is certainly not easy for inexperienced educators, especially for Word Search Puzzle on difficult subjects. The more specific the subject matter is chosen, the more limited the range of vocabulary that can be included in the crossword puzzle. This is, of course, different from the common Word Search Puzzle which only aims to test general knowledge and insight. Therefore, educators must have sufficient knowledge and insight when practicing how to make Word Search Puzzles for learning media in schools

#### 4. Conclusion

The analysis of 25 selected papers (research articles) has the same focus to know, describe, find out, obtain, get, see, and determine the effectiveness of Word Search Puzzle in improving/increasing/enhancing students' vocabulary. All of the papers (data) use experimental research methods, the researcher wants to know the effect of the comparison of two learning media, namely using Word Search Puzzle and other learning media. Two comparisons this learning media uses two groups of students (control class and experiment class) with the application of different learning media of the two-learning media. Then a comparison was made of the results of the improvement and mastery of students' vocabulary. The results show that Word Search Puzzle is effective in increasing students' vocabulary mastery. This can be seen from the increasing/improvement scores from the pretest to the posttest both in the control class and experimental class. There is a significant difference between the experimental class's pre- and post-test mean scores.

When students study English vocabulary using crossword puzzles, they pay close attention to the teacher's explanation of English vocabulary. To enhance their skill and knowledge, students should always maintain their vocabulary by memorizing and practicing it while studying English. They must attempt memorization and practice with their vocabulary. Due to the difficulty of teaching English to second graders, the teacher must pay close attention to the level of the children. The students are excellent imitators. They will mimic the teacher's words and actions. Consequently, the teacher must be an effective medium for the students. It informs English teachers of the significance of the method in supporting the teaching-learning process, particularly vocabulary objectives. It is suggested to the teacher that utilizing Word Search Puzzleto to teach vocabulary can drive children to recall words. They become more engaged after the instruction. By utilizing crossword puzzles, students will have a simple and enjoyable approach to increasing their English vocabulary. Additionally, students must remember the vocabulary daily.

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