



Using Crossword Puzzle Game to Improve Students' Vocabulary Mastery

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Abstract

The study shows that using crossword puzzle games effectively improved the vocabulary mastery of grade VII students at SMP N 5 Padangsidempuan. The research, conducted through Classroom Action Research, revealed a significant increase in student scores, with the mean score rising from 60.17 in the first cycle to 82.60 in the second cycle. Observations and interviews indicated that students became more engaged and active in learning vocabulary. Compared to previous studies, this research demonstrated a greater improvement, with a 22.43-point increase in vocabulary mastery. This suggests that crossword puzzles are a valuable tool for enhancing students' language skills.

Keywords: Vocabulary Mastery; Crossword Puzzle Game; CAR; Active Learning; Language Skills.

Abstrak

Penelitian ini menunjukkan bahwa penggunaan permainan teka-teki silang dapat meningkatkan penguasaan kosakata siswa kelas VII di SMP N 5 Padangsidempuan. Penelitian yang dilakukan dengan metode Penelitian Tindakan Kelas ini menunjukkan peningkatan yang signifikan pada skor siswa, dengan rata-rata skor meningkat dari 60,17 pada siklus pertama menjadi 82,60 pada siklus kedua. Berdasarkan hasil observasi dan wawancara, siswa menjadi lebih aktif dan tertarik dalam pembelajaran kosakata. Dibandingkan dengan penelitian sebelumnya, penelitian ini menunjukkan peningkatan yang lebih besar, yaitu sebesar 22,43 poin. Hal ini menunjukkan bahwa teka-teki silang adalah alat yang efektif untuk meningkatkan keterampilan bahasa siswa.

Kata Kunci: Penguasaan Kosakata; Permainan Teka Teki Silang, PTK; Pembelajaran Aktif; Keahlian Berbahasa.

INTRODUCTION

Research on vocabulary in recent years has been widely conducted to clarify the level of vocabulary learning that learners need to achieve to read simplified and simplified material and to process various types of spoken and written texts, as well as the types of strategies that students use in understanding, using and remembering words. This means that vocabulary plays an important role in language (Richards & Renandya, 2022). People live in the 21st century or the popular era 4.0 where everything is easy to use and communicate with other people in the world. Many studies today claim that children create knowledge when children play, where play can build an engaging environment in the classroom where students feel free to explore their knowledge while learning. Apart from that, making students enjoy learning is very important, because students will learn better if students feel happy and enjoyable.

The problem of class VII students at SMP N 5 Padangsidempuan is that there is a weakness in vocabulary mastery. The minimum criteria for English is 75, many students do not reach the minimum completeness criteria. This is known from preliminary research by conducting interviews with teacher Hapsyah Sri Mei Siregar on November 27th 2023 at SMPN 5 Padangsidempuan. Teachers admit that only a few students master vocabulary. As is known, vocabulary is very important in language learning. According to (Richards & Renandya, 2022), vocabulary plays an important role in acquiring language skills which are the basis for learning to speak, listen, read and write. As a basis for learning a language, students need to learn vocabulary well so that it can make it easier for them in the learning process. This statement is also supported by (Hiebert & Kamil, 2005), vocabulary is a collection of words that we know the meaning of when we speak, write or read.

Another problem that affects the English language mastery of class VII students at SMPN 5 Padangsidempuan is the students' inability to master nouns. When asked about the distribution of nouns to students, they could not answer. The next problem is the inaccuracy of the strategies or methods used by teachers in teaching vocabulary. The teacher said that the teacher had used various vocabulary teaching strategies such as the Grammar Translation Method, Task

Based Language Teaching and also the Lecture Method. However, in reality students still do not master vocabulary well and fluently.

There are many strategies that can be used to learn and teach vocabulary such as total physical response. According to Richards and Rogers in (Sumarni et al., 2022), total physical response is a language teaching method that is built on the coordination of speech and action. It tries to teach language through physical motor activity. Philips in (Oktaviana, 2022) states that vocabulary is best learned when the meaning of words is illustrated, for example with pictures, actions or real objects. This means that pictures can be used to teach vocabulary to students so teachers cannot use the one note method all the time.

In this study, the researcher chose to use a crossword puzzle game to solve students' vocabulary problems. According to (Elizabeth, 2019), crossword puzzles are an excellent tool for cooperative learning. The crosswords in this section cover a wide variety of topics that students find interesting. Many people have successfully used this method to master vocabulary, one of them (Mansur et al., 2023) found that the use of crossword puzzles in vocabulary learning went well. Students enjoy learning, working together and sharing knowledge with each other freely which motivates them to achieve better grades. Based on the explanation above, researchers are interested in using the Crossword Puzzle Game as a game to teach vocabulary at SMP N 5 Padangsidimpuan. This research is classroom action research with the aim of increasing students' vocabulary mastery.

METHOD

This research was conducted at SMP Negeri 5 Padangsidimpuan. It is located on Jl. Perintis Kemerdekaan, Padang Matinggi, South Padangsidimpuan District, Padangsidimpuan City. This research was carried out from October 2023 until June 2024. This research used classroom action research. In this research, researchers collaborated with Mrs. Hapsyah as a class VII teacher at SMP N 5 Padangsidimpuan. The participants in this research were students and teachers of class VII SMP N 5 Padangsidimpuan. There were 23 students as participants and one teacher as a collaborator. The data in this research was collected using interview, observation sheet and test. The data found from interview are used to

get information about students' feelings about giving opinions before and after implementing the crossword puzzle game. The data found from observation are used to know what strategy that the teacher use in teaching and to know what was the problem while learning process. The result found from test are used to know the improvement of students' mean score.

RESULT AND DISCUSSION

Results of the Class Learning Process in Cycle 1 and Cycle 2

Cycle 1

In this research, the researcher acts as a teacher and the teacher as a collaborator. The teacher observed the researcher when the researcher takes action in each cycle.

After that, the researcher gave greetings to open the class, prayed before starting the lesson, checked student attendance, and to improve the relationship between students and researchers, the researcher introduced herself and the students also did so, and explained the purpose of the research to their class. Researcher also provided motivation.

The next step, the researcher asked students about related material (things in the school) that had been discussed by showing pictures of the material that would be given before giving the first material. The researcher gave a paper in the form of a crossword puzzle game and asked each student to work on the game individually. Researcher and students together examine the crossword puzzle game. Researcher asked students to write down the vocabulary in notebooks. Researcher asked students questions to check whether they understand it. The researcher closed the material and asked about the students' difficulties in learning vocabulary through playing crossword puzzles and explained it to everyone and the researcher closed the meeting by praying with all the students.

While carrying out some of the previous actions, the teacher observes the students and the class process. In observing actions, researchers used observation sheets to observe students and the teaching and learning process.

Table 1. Resume of Variable Score in cycle I

Descriptive	Statistic
Total Points	336
Total score	1384
Highest score	84
Lowest score	40
Mean	60.17
Median	60
Modus	40 and 44
Range	44

The table above shows that the total score of 23 class VII students is 1.384 with 336 points. The mean score was 60.17. The highest score is 84. The lowest score is 40. The median is 60. The mode is 40 and 44. The range is 40.

Based on the quality classification of student grades, 30.43% are in the low criteria. This means that students' vocabulary mastery is still low. For more clarity on students' vocabulary mastery based on the indicators, the researcher presented the following picture:

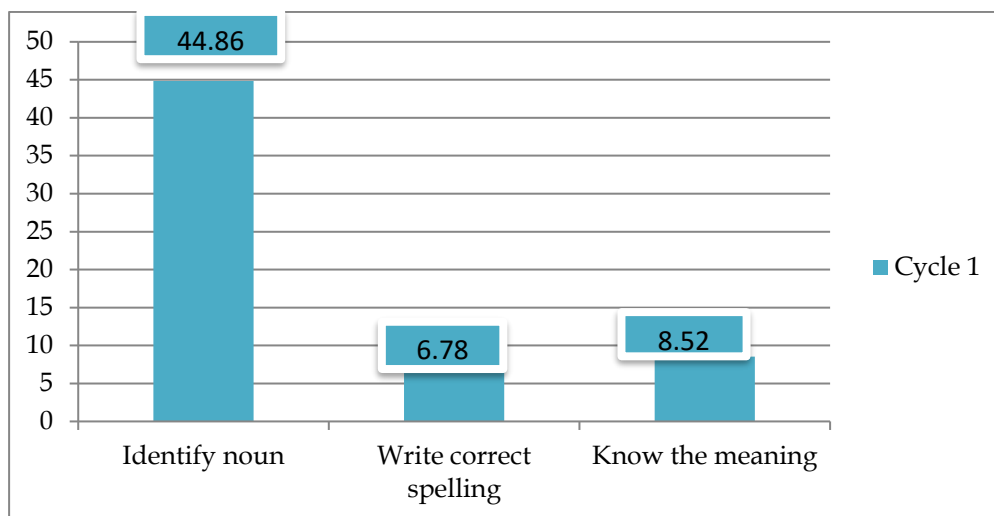


Figure 1 The Students' Vocabulary Indicator in Cycle 1

From these conditions, the researcher realized that the first cycle was low, or the results of the first cycle were less successful in improving students' vocabulary mastery. It can be concluded that these actions need to be improved and changed to increase students' vocabulary mastery again. Researcher should change tricks or new atmosphere in the teaching and learning process activities (Harianja, & M Khalid, 2023)

To improve this, the researcher reflected on the action research and efforts made in the first cycle. This means evaluating the teaching and learning process in the first cycle and providing solutions in the next cycle. Therefore, observations carried out by researchers and collaborating teachers aim to find out problems when actions or teaching and learning processes have been carried out. Based on this and the results of cycle 1, it is necessary to improve and provide solutions to improve students who are lacking in each indicator of the vocabulary test. Finally, researchers and collaborating teachers concluded that the first cycle must be improved, especially in learning planning, and the tricks or atmosphere of the teaching and learning process in the next cycle from (Hartono, 2004). Making re-planning of the first cycle which can be completed in the next cycle clearly. Below are some of the problems and solutions:

Table 2. The First Cycle of Problems and Solutions

Problems in Cycle 1	Solution
Most students are still low in writing the correct spelling of words	The researcher will ask students to write the word more often. Researchers will explain in full and briefly.
Most students do not follow the steps in playing crossword games	The researcher will walk around the classroom and pay attention to each student during the crossword puzzle game.
Most of the students did not know the meaning of the word	The researcher will provide further explanation and inform students of the meaning of these words.

Source: observations from researcher and co-teacher.

Based on the results of interviews and observations, there were three problems that researchers found in cycle 1. They were; Most of the students are still low in writing the correct spelling of words, most of the students do not follow the steps in the crossword puzzle game, most of the students do not know the meaning of the word, to solve these problems the researcher prepared the solution in each problem. Researchers will provide solutions to solve student problems. Researchers will make improvements in the next cycle.

Cycle 2

Cycle 2 was carried out while applying the second test. The results of students' vocabulary scores in cycle 2 are shown in the table below:

Table 3. Resume of Variable Score in cycle II

Descriptive	Statistic
Total Points	475
Total score	1900
Highest score	100
Lowest score	72
Mean	82.78
Median	80
Modus	76
Range	28

The table above shows that the total score of 23 class VII students is 1900 with 475 points. The mean score was 82.78. The highest score is 100. The lowest score is 72. The median is 80. The modus is 76. The range is 28.

Based on the results of the first test in cycle 2, the researcher obtained test results for students' vocabulary mastery based on vocabulary test indicators. The results showed that vocabulary attainment increased. There were 20 students who obtained KKM (75) passing scores. The total student score in cycle 2 is 475. The students' vocabulary test score is the sum of the scores from several vocabulary test indicators. Namely, students are able to identify nouns (objects at school) in English, students are able to write the correct spelling of words, students are able to know the meaning of identification of each word, know the indicator of the average student score in the vocabulary test, the researcher will describe it as in the following table :

Table 5. Students Indicator Mean Score in Cycle 2

NO.	Indicator	Total correct answers	Percentage	Maximum score percentage
1.	Students are able to recognize noun (thing inside it's school) in English	274	47.65%	56%
2.	Students are able to write Correct spelling of say	116	20.17%	28%
3.	Students are able to	85	14.78%	16%

NO.	Indicator	Total correct answers	Percentage	Maximum score percentage
	know that's the meaning of every word			
	Total	475	82.60%	100%

Based on the table above, it shows that the increase occurred in cycle 2. Students were able to increase their scores on each vocabulary test indicator. The mean score of students' vocabulary mastery by using crossword games in cycle 2 was 82.60 while in cycle 1 it was 60.17. This means that the mean score of students in cycle 2 is higher than the mean score of students in cycle 1.

Classifying the quality of students' scores in vocabulary tests, researcher must know the percentage of students' mean score. The method is the number of students who passed the KKM (20 students) multiplied by 100% then divided by the number of students (23 students), the result is 86.95%. So the percentage of students' mean score in cycle 2 is 86.95%. Based on the quality classification of student grades, 86.95% have good criteria. This means that students' vocabulary is good in cycle 2.

Researcher also provide a graph showing the comparison of student learning achievement between cycle 1 and cycle 2 which can be seen below:

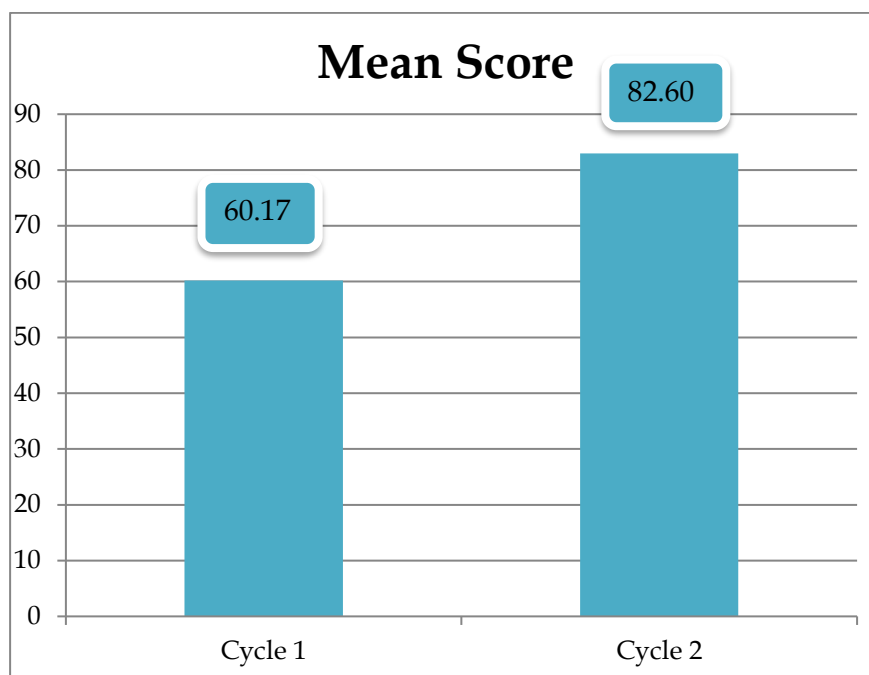


Figure 4 Comparison of Student Achievement in Cycle 1 and Cycle 2

From the figure above, you can see the difference in average student scores. Based on the results of data analysis and research findings, it can be concluded that students' vocabulary mastery increased in cycle 2. From the test in cycle 1 the students' average score was 60.17, increasing to 82.60 in the cycle 2 test. This means that the application of puzzle games Crosswords can improve students' vocabulary mastery.

This research was conducted at SMP N 5 Padangsidimpuan with a total of 23 participants. Researchers agree and support the theory that crossword puzzle games can improve students' vocabulary mastery as stated by Ball Crosswords are an excellent vehicle for cooperative learning. The crosswords in this section cover a wide variety of topics that students find interesting. The teaching technique, working with classmates, students can share their English knowledge in solving various vocabulary or grammar questions posed in the puzzles. Once students have completed the puzzle (in class or as assigned homework to do with classmates), the teacher should discuss the solution with the entire class. Give students example sentences that use some of the new words, and ask them to write their own sentences. (Ivonadewi, 2020)

The difference between this research and previous research is first, the research location is different, where in this research the researcher chose the location at SMP N 5 Padangsidimpuan. Second, the research results are different, in the previous study there was an increase of 17.05 while in this study there was an increase of 22.43.

Crossword games give students real-world experience in using and discovering new vocabulary, thereby helping them understand and remember vocabulary better. Crossword puzzle games can improve students' vocabulary mastery, especially nouns (objects at school). Based on research findings, researchers obtained research results showing that there was an increase in students' vocabulary mastery through crossword puzzle games in the learning process.

This can be seen from cycle 1 and cycle I2, there is a percentage increase in answering the test. The average score used to be from 60.17 to 82.60. Here the researcher has discussed that finding with other findings from other studies. This

research is not that first the research has already been completed, there are some of the studies related to this research.

First, Tambartiji and Atmawidjaja, in the first cycle the students' average score was 58.97 and was categorized as still very low. Therefore in the second cycle, the average score of the students was increased to 76.02 and the good category (Harianja, & M Khalid, 2023)

Second, Idris et al., the results of the calculation process that researchers obtained in the initial test had an A meaning of 59.05 and the post test had an average of 82.20 in the experimental class. (Idris et al, 2023)

Third, (Rifai et al, 2023), in cycle 1 students obtained classical completeness of 53.3% and this increased in cycle 2 to 90% thereafter. do a vocabulary test through multiple choice. The difference between this study and previous research is the level of increase, in this study the increase reached 5.34% while in other studies it reached 36.7%. This research has similarities with previous research, namely that both show an increase in students' vocabulary after carrying out the learning process using crossword puzzle games.

The differences between this research and previous research were, firstly, the research location was different, where in this research the researcher chose the location at SMP N 5 Padangsidempuan. Secondly, the results of different studies, in the previous study the increase was 17.05 while in this study the increase was 22.43.

Based on the description above it can be seen that the Crossword Puzzle Game can improve students' vocabulary. The researcher hopes the Crossword Puzzle Game can improve the students' vocabulary and add to students' interest in studying vocabulary. So, this research will be about Improving Students' Vocabulary Mastery by Using the Crossword Puzzle Game at Grade VII SMP N 5 Padangsidempuan.

CONCLUSION

Having analyzed and presented the data in the previous chapter, the conclusion of the research was that using of crossword puzzle game in teaching vocabulary mastery can improve students' vocabulary mastery. So, it can be concluded based on the students' vocabulary test mean score in which was in

cycle 1 were 60.17 and cycle 2 was 82.60. It can be concluded that crossword puzzle games can improve students' vocabulary mastery at Grade VII SMP N 5 Padangsidempuan.

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