# Using Crossword Puzzles to Improve the Eighth Grade Students' Vocabulary Mastery 

Bagus Prasetyo, Aan Erlyana Fardhani, Sugeng Ariyanto,<br>FKIP, The university of Jember


#### Abstract

This article is intended to describe the result of the research on improving students' vocabulary mastery by using crossword puzzles. The research design was Classroom Action Research. The research subject and area of the research, the students of class VIII-G at SMPN 1 Bangsalsari Jember were determined by using purposive method. The research data collection methods were vocabulary mastery test, observation, interview, and documentation. The collected data were analyzed by using percentage formula. The result of observations showed that the students were categorized active students and it increased up to $79 \%$ in Cycle 2. Further, the result of vocabulary mastery test indicated that the students achieved the standard minimum score in Cycle 2. Therefore, using crossword puzzles could improve the VIII-G students' vocabulary mastery and their active participation.


Keywords: Crossword Puzzles, Vocabulary Mastery, Classroom Action Research

English as an international language is used in many fields all over the world. In this era of globalization, people should master English well to get a better chance in global competition. The aim of mastering English itself is not only used for communication, but also to transfer information in any fields of study such as business, science, technology, education, computer, and many others. In Indonesia, English is considered as the first foreign language that must be learned by the students. According to the 2006 Institutional Level Curriculum, English is one of the compulsory subjects that must be taught from junior high school up to university level. The general aim of teaching English is to develop the students' achievement to communicate both in spoken and written forms. In learning English,
there are four language skills (listening, speaking, reading, and writing) and three language components (grammar, vocabulary, pronunciation) that must be mastered by the students

Vocabulary is one of three language components that must be acquired and mastered first of the other language components. It is important for the students to enrich their vocabulary if they want to master English. The quality of someone's language skills depends on his quality and quantity of vocabulary they have (Tarigan, 1998:2). This means that learning English can be impossible for the students if they lack of vocabulary. Further, Sedita (2005:1) notes that vocabulary knowledge is important because it encompasses all the words that must be known to understand ideas, to express ideas, and to communicate effectively. In other words, vocabulary is like bricks for constructing a building, they are vital for building a language because language is made up from words. If students want to communicate by using English effectively, they must have large stock of English vocabulary to communicate well by using English. Therefore, the students have to improve and enlarge their vocabulary because it is an important language component in learning English.

A preliminary study was carried out on August $14^{\text {th }}, 2015$ to get some information dealing with the students' difficulties in learning English especially vocabulary and its problems at SMPN 1 Bangsalsari Jember. The English teacher of the eighth grade informed that she taught vocabulary integrated with reading skill. The students were asked to underline some difficult words in reading text given by the teacher. Then, the English teacher asked them to find the meaning of those words by using dictionary and asked to memorize the words. She added that most of the students faced some difficulties in learning vocabulary especially in understanding
the meaning, spelling, and memorizing the words. The students also did not have motivation to bring dictionary although they did not know the meaning of some words during learning English.

In this case, the researcher proposed crossword puzzles as the instructional teaching media. They are appropriate to be applied in order to make the students be more motivated in the process of vocabulary teaching and learning. Napa (1993) in Damai (2011) says that crossword puzzles make learning materials more enjoyable, interesting, and challenging. From this statement, it can be concluded that crossword puzzles can be used to sustain the students' interest in learning vocabulary because they make the students learning vocabulary unconsciously. The students feel that doing crossword puzzles is like a game rather than learning. Besides, they are also interesting and challenging because crossword puzzles use some clues to find out the correct answers and put them to the appropriate boxes and they have to compete with other students to finish them.

A previous study related to the use of crossword puzzles in improving the students' vocabulary achievement was done by Damai (2011) at SMPN 2 Tegalsari Banyuwangi. He reported that the use of crossword puzzles could improve the students' vocabulary achievement from $75.5 \%$ to $78.6 \%$ by conducting a classroom action research in two cycles. Similar action research conducted by Trisna (2014) at SMPN 2 RambipujiJember, also found that the use of crossword puzzles could improve the students' vocabulary achievement from $63.88 \%$ in Cycle 1 to $83.33 \%$ in Cycle 2. In the preliminary study done before, the English teacher also reported that the students of class VIII-G at SMPN 1 Bangsalsari Jember had problems in mastering English especially vocabulary. Besides, they also had the lowest mean score among the other classes. In this research, the researcher applied crossword
puzzles during the teaching and learning process of vocabulary. By conducting crossword puzzles, it was expected that the students were able to improve their active participation during the teaching and learning process of vocabulary and also their vocabulary mastery as well. Therefore, the researcher decided to conduct a research entitled "Improving the Eighth Grade Students' Vocabulary Mastery at SMPN 1 Bangsalsari Jember".

## Research Method

The design of this research was a Classroom Action Research (CAR). The aim of this research was to improve the students' vocabulary mastery by using crossword puzzles. Elliot (1991:1) defines a classroom action research as the study of a social situation with a view to improving the quality of action within it. According to Arikunto (2010:130), a classroom action research is a research which is done in the classroom by doing intentional activities. To sum up, a classroom action research is a research which is intended to solve practical problems in teaching learning process in the classroom.

The area of the research was determined by using purposive method. Fraenkelet al. (2012:100) state that a purposive method is a method that uses the researcher's judgment to select a sample that they believe, based on prior information, and the available data. The research subjects of this research were the students of class VIIIG at SMPN 1 BangsalsariJember in the 2015/2016 academic year. This class was chosen because they had the lowest mean score of English that was 66 among the other classes. In addition, the students of class VIII-G were also less active during English lesson. Therefore, both of the students' vocabulary mastery and the students' active participation needed to be improved.

In this research, there were 2 kinds of data collected. They were primary and supporting data. The primary data consisted of vocabulary test and classroom observation. The vocabulary test was used to measure the students' vocabulary mastery after they were taught vocabulary by using crossword puzzles. In this research, the researcher applied an objective test. An objective test is a test that does not require judgment in the scoring process (Hughes, 2003:22). The type of the objective test applied in this research was multiple choice. Cooper (2010:306) said that multiple choice has some advantages; it can assess learning at all levels of complexity, it can be highly reliable and objective, it test fairly large knowledge in short of time, and it is easy to score. Thus, this type of test was chosen because it was more practical, easier to do in terms of scoring, and enable the researcher and the English teacher to score objectively. The vocabulary test was given in the third meeting of each cycle. Meanwhile, the classroom observation was conducted to gain the primary data about the students' participation in the vocabulary teaching and learning process by using crossword puzzles. It was done in every meeting of each cycle. The researcher used observation checklist to record the indicators of the students' participation to be observed

The supporting data were gained through interview and documentation. Interview in this research was used to get the supporting data dealing with the English book, the way to teach vocabulary, and the students' problems in learning vocabulary. It was done by interviewing the English teacher of the eighth grade at SMPN 1 BangsalsariJember. Further, the documentation, such as the list of the research subjects' names and the students' previous score of English were also used to get other data which were related to the research. Data analysis and reflection were needed to do in order to analyse the obtain data and to know the students' improvement of their active participation and vocabulary mastery after being taught
by using crossword puzzles. The data analysis and reflection were discussed in the following part.

The data about students' active participation and vocabulary test were analysed by using the formula: $\mathrm{E}=\mathrm{A} / \mathrm{N} \times 100 \%$ where E is the percentages of the students who are active or the percentages of the students who achieve the target score $(\geq 75)$ in the vocabulary test; A is the number of the students who are categorized as active students or the number of the students who achieve the target score $(\geq 75)$ in the vocabulary test and N is the total number of the students (the research subjects) (Cohen et al., 2000:326)

## Research Results

The implementation of the action was done in three meetings. The first meeting was conducted on September $5^{\text {th }}, 2015$ and the second meeting was carried out on September $7^{\text {th }}, 2015$. The vocabulary test was conducted in the third meeting on September $9^{\text {th }}, 2015$. The first meeting of Cycle 1 was done by implementing the activities in Lesson Plan 1 while the second meeting was conducted based on Lesson Plan 2 and the third meeting was used to administer the vocabulary test. The action was done collaboratively with the English teacher. In this research, the researcher did the action while the English teacher became an observer of the students' active participation.

The result of observation in the first meeting in Cycle 1 showed that there were 21 students who were categorized as active students and 13 students were categorized as passive students. Meanwhile, the result of observation in the second meeting in Cycle 1 indicated that as many as 24 students were categorized as active students while the other 12 students were categorized as passive ones. On the average, the
percentage result of observations of the students' active participation was only $64.5 \%$. It means that the students' active participation in Cycle 1 was still under the target percentage required in this research that was $75 \%$. In other words, the students' active participation in the vocabulary teaching and learning process by using crossword puzzles in Cycle 1 did not achieve the percentage target yet. Further, the result of the students' vocabulary test in Cycle 1 indicated that as many as 25 students ( $69 \%$ ) achieved the target score that was $\geq 75$ and 11 students ( $31 \%$ ) could not achieve the target score. From this result, it can be known that the students' vocabulary mastery test in Cycle 1 did not meet the required target yet and it needed at least $6 \%$ to achieve the required target in this research. Therefore, the second Cycle needed to be conducted by revising some weaknesses of the action in Cycle 1.

The action was continued to the second Cycle because the action in the first Cycle did not achieve the required target in this research. It was conducted by revising some weaknesses that occurred in Cycle 1. The action in Cycle 2 was also done in three meetings. The first meeting was conducted on September $12^{\text {th }}, 2015$, the second meeting was carried out on September $14^{\text {th }}, 2015$ while vocabulary test in Cycle 2 was conducted on September $16^{\text {th }}, 2015$. In Cycle 2, the implementation of the action was done by the researcher while the English teacher still became an observer for the students' active participation

The result of observation in the first meeting in Cycle 2 showed that there were 27 students who were categorized as active students and 9 students were categorized as passive students. Meanwhile, the result of observation in the second meeting in Cycle 2 indicated that as many as 30 students were categorized as active students while the other 6 students were categorized as passive ones. The average result of
the students' active participation in Cycle 2 revealed the fact that there were $79 \%$ of the students were categorized as active participants. It means that the percentage of the students' active participation in Cycle 2 had achieved the required target in this research. Besides, from the average result of the students' active participation in the first Cycle that was $64.5 \%$ and the average result of the students' active participation in the second Cycle that was $79 \%$, it can be seen that the improvement of the students' active participation from Cycle 1 to Cycle 2 was as much as $14.5 \%$. Further, the result of vocabulary mastery test in Cycle 2 indicated that as many as 29 students ( $81 \%$ ) out of 36 students achieved the standard minimum score that was $\geq 75$. The percentage result of the students' vocabulary mastery test indicated that the action in Cycle 2 had already fulfilled the required target percentage in this research that was at least $75 \%$. Therefore, the action in this classroom action research was stopped.

## Discussion

This classroom action research was conducted in two Cycles and each Cycle consisted of three meetings. Two meetings were used for teaching learning of vocabulary by using crossword puzzles and one meeting was used for conducting vocabulary test. The researcher conducted the research collaboratively with the English teacher. Based on the average result of classroom observation, the percentage of the students' active participation increased from $64.5 \%$ in Cycle 1 to $79 \%$ in Cycle 2. In other words, there was an improvement as much as $14.5 \%$ of the students active participation. From this result, it can be concluded that the use of crossword puzzles could improve the students' active participation in the vocabulary teaching and learning process.

The students participated actively during the teaching and learning process of vocabulary by using crossword puzzles because they were interested in the materials. This result was relevant with the theory saying that crossword puzzles are associated with recreational activity and can be less intimidating for the students (Cheryl, 2012:1). The students felt that doing crossword puzzles was like a game rather than learning. It was because crossword puzzles were associated with the game playing, therefore it made the students felt free and less intimidating in learning vocabulary by using crossword puzzles

Meanwhile, the result of the students' vocabulary test showed an improvement from Cycle 1 to Cycle 2. There were $69 \%$ of the students who got score $\geq 75$ in the vocabulary test Cycle 1. Further, in Cycle 2, there were $81 \%$ of the students who got score more than $\geq 75$. There was an improvement of the percentage result of the students' vocabulary test from Cycle 1 to Cycle 2 as much as $12 \%$. The result showed that the required target percentage result in this research could achieve in Cycle 2 after overcoming the problems in Cycle 1. As a result, it can be concluded that the use of crossword puzzles could improve the students' vocabulary mastery.

This successful result was relevant with the theory saying that crossword puzzles can be helpful for developing and learning vocabulary (Spivey and Loraine, 2010:1). It was because crossword puzzles brought fun activities in developing and learning vocabulary to the students. They learned new words and also the spelling of the words unconsciously since crossword puzzles was kind of word games that required the students to complete the empty boxes with the correct words as well as the correct spelling of the words. The result of this research also supported the theory saying that one of the advantages of using crossword puzzles is crossword puzzles can stimulate and motivate the students on how to use logic, reasoning, vocabulary, spelling and organizational skills (Cheryl, 2012:1). The students learned
how to spell the words unconsciously while doing crossword puzzles. By looking at the clues and the empty boxes in the crossword puzzles, they could know how many letters that should be filled or how many letters the answer had. Besides, after filling the empty boxes with the correct answer, they also gained an additional clue for the answer in the following boxes. The students also could memorize the words and understand the meaning of the words after doing the puzzles because they became familiar with the words they never knew before. It definitely solved the students' problems that had been informed by the English teacher in the preliminary study that the students experienced some difficulties in learning vocabulary especially in memorizing, spelling, and understanding the meaning of the words

The result of this research was in line with some previous researches; one of them was conducted by Damai (2011) who reported that teaching vocabulary by using crossword puzzles could improve the vocabulary achievement of the eighth year students at SMPN 2 Tegalsari Banyuwangi. Another research conducted by Trisna (2014), she found that the use of crossword puzzles in teaching vocabulary could improve the students' vocabulary achievement of the eighth grade at SMPN 2 RambipujiJember. The researcher used these previous researches as references, but there was a difference between this research and these previous researches. These two researches used both kinds of crossword puzzles in the form of pictures as the clues and crossword puzzles by using clues in the form of phrases and sentences. This research used only crossword puzzles in the form of phrases and sentences as the clues since the picture of adjectives and adverbs were quite difficult to be drawn as the clues. The researcher also gave 20 minutes in doing the crossword puzzles as the vocabulary exercises so that they had enough time to fill all the boxes in the crossword puzzles. This research also had the similarity with the previous researches. The researcher also conducted the crossword puzzles in teaching
vocabulary by using the words that were stated in the recount text given to the students as the answers of the crossword puzzles. In conclusion, crossword puzzles are effective to be used as the media and also game in teaching vocabulary to the students. It is based on the result that the use of crossword puzzles in teaching vocabulary could improve the students' vocabulary mastery and also their active participation at SMPN 1 Bangsalsari Jember in the 2015/2016 academic year

## Conclusion

Based on the above data analysis and discussion, using crossword puzzles could improve the eighth grade students' vocabulary mastery and their active participation at SMPN 1 Bangsalsari Jember in the 2015/2016 academic year. Therefore, the English teacher at the school have to use crossword puzzles in teaching vocabulary, since it can improve the students' vocabulary mastery and also their active participation. Further, future researchers have to use these results as information and input to conduct a further research dealing with similar problems by using different research designs such as the descriptive and experimental research or the same research design but different levels of the research subjects and schools.

## Acknowledgement

This article is the summary of the research findings of the thesis entitled 'Improving the Eighth Grade Students' Vocabulary Mastery by Using Crossword Puzzles at SMPN 1 Bangsalsari Jember written by Bagus Prasetyo (2016).

## REFERENCES

Arikunto, Suharsimi. (2010). Prosedur penelitian: Suatu pendekatan praktik [Research procedure: a practical approach]. Jakarta: RinekaCipta.

Cheryl, Jackson. (2012). Crossword puzzles-Educational tool for kids and adults. (http://cheryl-j.hubpages.com/hub/Crossword-Puzzles-Educational-Tool -for-Kids-and-Adults) (date of access: 7 Jun. 2014).

Cohen, Louis. - Lawrence Manion. - Keith Morrison. (2000). Research methods in education ( $5^{\text {th }}$ edition). London: Taylor and Francis Group.

Cooper, James. (2010). Classroom teaching skill (9 ${ }^{\text {th }}$ edition). United States: Wadsworth.

Damai, Idul Manafa. (2011). The Use of Crossword Puzzles to improve the Eighth Year Students' Vocabulary Achievement at SMPN 2 TegalsariBanyuwangi in the 2010/2011 Academic Year. Jember.UniversitasJember (Unpublished Thesis).

Elliot, John. (1991). Action research for educational change. Philadelphia: Open University Press.

Fraenkel, Jack. - Norman Wallen. - Helen Hyun.(2012). How to design and evaluate research in education ( $8^{\text {th }}$ edition). New York: McGraw-Hill Companies

Hughes, Arthur. (2003). Testing for language teachers (2 $2^{\text {nd }}$ edition). Cambridge: Cambridge University Press.

Sedita, Joan. (2005). Effective vocabulary instruction. (http://www.keystoliteracy. com/ wp-content/ uploads/2012/08/effective-vocabularyinstruction. pdf) (date of access: 30 Jun. 2015).

Spivey, Becky. - Susie Loraine. (2010). Puzzles - toys of teaching tools?.(www.superduperinc.com.) (date of access: 19 Sep. 2015).

Standar kompetensi dan kompetensi dasar mata pelajaran bahasa Inggris SMP dan MTs [Standard competence and basic competence in the English subject for junior high schools]. (2006). Jakarta: Depdiknas.

Tarigan, Henry Guntur. (1998). Pengajaran Kosakata [Vocabulary teaching]. Bandung: Angkasa.
, Meyrizha Nanda. (2014). Improving the VIII-D Grade Students' Vocabulary Achievement and Their Active Participation by Using Crossword Puzzles and Dictionary at SMPN 2 RambipujiJember in the 2013/2014 Academic Year. Jember.UniversitasJember (Unpublished Thesis).

