

## THE EFFECT OF USING CROSSWORD PUZZLE ON VOCABULARY ACHIEVEMENT OF THE EIGHTH YEAR STUDENTS AT SMP NEGERI 5 JEMBER

Neneng Ratnawati<sup>7</sup>, Wiwiek Eko Bindarti<sup>8</sup>, Annur Rofiq<sup>9</sup>

**Abstract :** *This Research was intended to know the significant effect of using Crossword puzzle on vocabulary achievement of the eighth year students of SMP Negeri 5 Jember. The research design was Pre -experimental research with Nonequivalent-Group Post-test Only Design. The students' scores of Vocabulary Achievement were analyzed by applying t-test formula the result indicated that the value of t-test was 2.54, while the t-table with the significant level 5% and degree of freedom (Df) 72 was 1,67. The value of t-test was 2,54 and it was higher than 1.67 (2.54 >1.67). In conclusion, the null hypothesis (H0) was rejected while the alternate hypothesis (H1) was accepted. In conclusion, there was a significant effect of using Crossword Puzzle on Vocabulary achievement of the students at SMP Negeri 5 Jember.*

**Key Words :** *Crossword Puzzle, Vocabulary Achievement*

### INTRODUCTION

English as an international language plays an important role in international community. The language is not only used in communication but also used in transferring information. Considering that English is the language of international communication, the students have to master English well both in oral and written forms. the objective of teaching English is to develop English communicative competence in the four language skills namely; listening, speaking, reading and writing. In addition to these, students should also be able to master the language components. They are structure, pronunciation, and vocabulary. Thus, to support the four skills above, we need vocabulary. Napa (1991:6) says that vocabulary is one of the language components and that no language exists without words.

Rahmadi (1990:1) states that students still have problems with the four language skills due to lack of vocabulary achievement. It is difficult for them to develop their vocabulary because the students sometimes forget with the vocabulary materials that the teacher has explained. Occasionally, in teaching learning process, the students feel afraid of following the teaching learning process of English because they do not understand about the meaning of English words in English. To avoid that condition and to motivate the students in learning English, the teacher can use teaching aids to give

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<sup>7</sup> Mahasiswa Program Studi Pendidikan Bahasa Inggris Jurusan P.Bahasa dan Seni FKIP UNEJ

<sup>8</sup> Dosen Program Studi Pendidikan Bahasa Inggris Jurusan P.Bahasa dan Seni FKIP UNEJ

<sup>9</sup> Dosen Program Studi Pendidikan Bahasa Inggris Jurusan P.Bahasa dan Seni FKIP UNEJ

different atmosphere to classroom situation that make the students love the subject. One of the teaching aids that can be used in teaching learning process is crossword puzzle.

According to Adenan (1992:9), puzzle and games are obvious types of self motivating activity which are interesting and challenging to teach language. One of the puzzles that can be given by the teacher to make the students interested in studying English especially vocabulary is Crossword Puzzle. This is in line with Karim and Hasbullah's statement that an interesting material and media in teaching language is Crossword Puzzle (1986:36).

This research was intended to know whether or not there was a significant effect of using crossword puzzle on vocabulary achievement of the eighth year students of SMP Negeri 5 Jember in the 2012/2013 academic year. In this research, the researcher taught vocabulary by using crossword puzzle with pictures and phrases or sentences as the clues

Vocabulary has an important role in language. We should know the vocabulary when we are communicating or sharing ideas with other people. Hatch and Brown (1995:1) state that vocabulary refers to a list or a set of words that individual speakers of language might use. In addition, Richek (2006:2) states that the students will have difficulty in learning English at school without having adequate vocabulary.

Achievement, according to Hornby (1995:10), is something achieved or done successfully with effort or skill. Then, it can be concluded that the students' vocabulary achievement is the students' ability in achieving or mastering the collection of words recognized and understood with successful efforts.

Language teaching and learning in this case English is a hard work. The teachers must be able to bring the students to a situation in which the students become active and interested in English teaching learning process.

Karim and Hasbullah (1986:36) say that one of the interesting techniques in teaching language is Crossword Puzzle. This showed that Crossword Puzzle could be used to sustain students' interest and make the students feel relax. The construction technique consisted of arranging the words so that they crossed the appropriate points. The arrangement was then made to correspond to horizontal and vertical clues.

The previous study conducted by Rahmawati (2004) showed that the use of crossword puzzle treatment could affectively improve students' motivation in learning

English. In detail, it also revealed that there was a significant difference in students' vocabulary achievement between those who used puzzle and those who did not. Based on the previous study about using games in improving students' vocabulary by Marafah (2006), the result of the observation showed that the games treatment significantly improved the students' vocabulary achievement. Thus, by using the similar method, the crossword puzzle treatment was expected to affect students' achievement, especially for the eighth year students' vocabulary achievement at SMP Negeri 5 Jember in the 2012/2013 academic year.

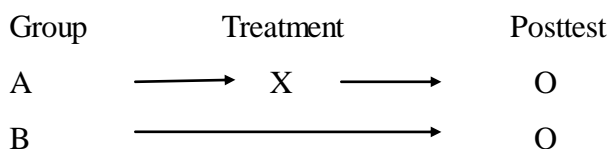
Considering the opinions above, in this research, crossword puzzle was used in teaching vocabulary because it was very useful to help students learn new words. It can be used in the vocabulary teaching learning process to increase the students' interest and motivation in learning English vocabulary and make the students feel more relax.

Based on the review of related literature above, the research hypothesis was formulated as follows: There was a significant effect of using Crossword puzzles on the eighth year students' vocabulary achievement at SMP Negeri 5 Jember in the 2012/2013 academic year.

## **RESEARCH METHODS**

The research design of this research was Pre-experimental design, with Nonequivalent-Groups Posttest-Only Design (Mc.Millan, 1992:52). In this research, the subjects were tested in existing or intact group without random pre-selection process. Therefore, the researcher used the available classes. In this design, two classes were chosen as the experimental group and control group from the eighth available classes of the eighth grade at SMP Negeri 5 Jember in the 2012/2013 academic year. The two classes were selected by considering the scores of English vocabulary test given as a part of homogeneity analysis. As the population was homogeneous, two classes were taken randomly as the experimental and control class by using lottery. The experimental class was given a treatment, that was, teaching vocabulary by using Crossword puzzle, while the control class was taught vocabulary by using lecturing method. The purpose of this research was to know whether there was a significant effect of using Crossword Puzzle or not on vocabulary achievement.

The design of the research can be illustrated as follows.



Note :

A : Experimental group

B : Control Group

X : Treatment for experimental group

O : Post test

(McMillan, 1992:53)

The steps of the research design were as follows :

1. Giving homogeneity test to all classes of the eighth grade in order to know the homogeneity of the population.
2. Analyzing the scores of English vocabulary test in the homogeneity test by using ANOVA (Analysis of Variance) to know the homogeneity of the population.
3. Giving treatment to the experimental group, that was teaching vocabulary by using crossword puzzle, while the control group was taught vocabulary by using Lecturing technique.
4. The treatment to the experimental group was conducted in two meetings and so was the control group.
5. Administering the try-out test to establish reliability of the test items. The try out was applied to one of the classes which was not included as the research respondents.
6. Giving the vocabulary posttest to both of the classes (the experimental class and the control class) to know the result of the treatment given.
7. Analyzing the results of post test by applying the independent sample t-test of 5% significant level.
8. Drawing a conclusion from the result of the data analysis to answer the research problem.

The research area is chosen purposively (McMillan, 1992:76). The research area of this research was determined by using purposive method that was SMP Negeri 5 Jember. The Respondents of this research was the eighth year students of SMP Negeri 5 Jember in the 2012/2013 academic year. The Respondents were taken from Homogeneity test. The eighth year students consisted of six classes in which each class

consisted of 36 students. The research sample only included some of them since the population was more than 100 students. Two classes were chosen by Lottery as the samples if the population was homogeneous. However, the two classes having the closest mean difference were selected as the samples by using cluster random sampling if the population was heterogeneous.

The data collection method were test, interview, and documents. The data of this research was classified into primary data and secondary data. The primary data consisted of the students' scores collected by a Vocabulary achievement test. Then, the secondary data were collected by interview and documentation. The sources of documentation were taken from the school documents and the informant of the interview was the English teacher on the grade VIII students at SMP Negeri 5 Jember in the 2012/2013 academic year.

The test was to measure student's Vocabulary achievement by using Crossword Puzzle. The try out was conducted before administering the vocabulary posttest. The try out was given to another class that was not chosen as the experimental and control groups. The try out was administered to test the reliability coefficient, difficulty index and time allocation of the test items. A good test should have good validity and reliability (Hughes, 1996:2-3). The try out test, in this research was in the form of vocabulary achievement test. The total number of the test items was 40 items in the form of objective test with the completion type. The allocated time of the test was 60 minutes. The researcher gave the try out to a non- participant class in the research; it means that the researcher took the class which had the closest mean difference with the experimental and the control groups

The post test was conducted to both the experimental and the control groups after the treatment to know whether or not the mastery of the materials taught had given the effect to the students' vocabulary achievement.

The total number of the test items in this research was 40 items in the form of objective test with the completion type. The post test was administered for 60 minutes. Dealing with the scoring, the total score was 100, in which each item was scored 2.5 points.

Then, The interview was conducted by using semi structured interview in which a list of questions and details were developed to get the information needed during the

process of interview (Arikunto, 2006:227). The interview was conducted with the English teacher of the eighth year students by using the interview guide and a list of questions prepared. The interview was conducted before the research.

The data obtained from Vocabulary achievement post-test were analyzed to find the mean difference of the two groups (experimental group and control group). This research used t-test to analyze the primary data.

## **RESEARCH FINDINGS AND DISCUSSIONS**

The post test was administered to both the experimental and the control groups on October 30<sup>th</sup>, 2012 after the students had been given the treatment. The scores of the post test were used to investigate the significant difference between the experimental and the control groups. The result of post test was analyzed statistically by using independent simple t-test formula to know whether the mean difference between the experimental and control groups was significant or not.

Based on the result of data analysis in this research, the statistical value of t-test was 2.54, while the t-table with the significance level of 5% and the degree of freedom (Df) of 72 was 1.67. The value of t-test was 2.54 and it was higher than 1.67 ( $2.54 > 1.67$ ). Therefore, the null hypothesis ( $H_0$ ) which was formulated as: "there is no significant effect of using Crossword Puzzle on Vocabulary Achievement of the eighth year students of SMPN 5 Jember in the 2012/2013 Academic year" was rejected. On the other hand, the formulated alternative hypothesis ( $H_a$ ): "there is a significant effect of using Crossword Puzzle on Vocabulary Achievement of the eighth year students of SMPN 5 Jember in the 2012/2013 Academic year" was accepted.

Based on the data analysis of the students' scores of post test, it was known that the value of t-test was 2.54 and it was higher than 1.67. It means that Crossword Puzzle had a significant effect on the eighth grade students' Vocabulary achievement at SMPN 5 Jember in the 2012/2013 academic year.

The result of data analysis in this research proved that using Crossword puzzle affected the students' vocabulary achievement at SMP Negeri 5 Jember. It could be seen from the result of t-test analysis on the students' vocabulary achievement test scores that

the statistical value of the t-test was higher than the value of t-table with significant level of 5% ( $2,54 > 1,67$ ).

The result of the data analysis showed that the value of t-test was 2.54 and it was higher than 1.67. Therefore, it could be concluded that there was a significant effect of using Crossword Puzzle on the eighth grade students' vocabulary achievement at SMPN 5 Jember in the 2012/2013 academic year.

The result of this research was conformed with some previous research result. First, it was by Rahmawati (2004) who did the experimental research focusing on the use of Crossword Puzzle. She found that Crossword puzzle gave a significant effect on the eighth grade students' vocabulary achievement at SMP 6 Negeri Jember in the 2007/2008 academic year with the degree of relative effectiveness was 6.16. Therefore it proved that crossword puzzle was more effective technique that could be used in teaching learning activity, especially in teaching vocabulary. That it was compared to another previous research findings were disclosed from a research conducted by Marafah (2006) which proved that the use of crossword puzzle could improve the vocabulary achievement of the eighth year students at SMPN 2 Tegalsari Banyuwangi in the 2010/2011 academic year. It was proved by the increasing 4.18 point from the first circle implementation of the treatment. In brief, there was an increase of point from the first implementation to second implementation. There was evidence that the use of media was useful in teaching vocabulary because it raised the students' vocabulary achievement.

Based on the opinions above, Crossword puzzle gave significant effect to the eighth year students' vocabulary achievement at SMP Negeri 5 Jember in the 2012/2013 academic year.

## **CONCLUSIONS AND SUGGESTIONS**

Based on the analysis of post test result, hypothesis verification and discussion in the previous chapter, it can be concluded that there was a significant effect of using Crossword Puzzle on Vocabulary Achievement on the eighth year students at SMP Negeri 5 Jember in the 2012/2013 academic year.

As the use of Crossword Puzzle on teaching Vocabulary gave a significant effect on Vocabulary achievement; the researcher proposes some suggestions to the following people:

First, it is suggested that the English teacher of SMP uses Crossword Puzzle in teaching Vocabulary to make students more active in teaching learning process, Crossword Puzzle might be implemented in the classroom activity by providing the interesting clues, such as colourful pictures, so that the students will be motivated to join and participate in the activity because they are interested in the lesson.

Second, it is suggested that the result of this research can be used as a reference and information for future researchers to conduct further research dealing with the use of Crossword Puzzle by using different language skills or language components, in similar research design for example: Improving the eighth year Students' Vocabulary Achievement by Using Crossword puzzle.

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