Crosswords Puzzle as a Media for Increasing Vocabulary Mastery

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Abstract

The purpose of this study was to find out whether the interactive method by applying crossword puzzles can improve the vocabulary mastery of the first year students at Universitas Tama Jagakarsa. To find out whether the interactive method by applying crossword puzzles can increase students' vocabulary, the researchers gave students a pre-test before treatment and a post-test after treatment. The results showed that the calculation of the t-test from the results of the pre-test and post-test in the first cycle was 5.97 and 6.33 in the second cycle. Both are greater than t_{table} with n = 26 which is 2.06. This means that the use of crossword puzzles can improve students' vocabulary mastery. The teaching learning process by using crossword puzzle gives the positive effect in improving the student's vocabulary and the student's motivation in learning vocabulary. This is shown by the students' enthusiasm in doing crossword puzzle and most of the students more understand what the teacher said in cycle II than in cycle I.

Keywords: *crossword, learning media, vocabulary mastery, teaching method*

INTRODUCTION

Learning English, nowadays, is becoming increasingly important in Indonesia. This is because English is used for different purposes. English is not only used for communication, but English is also used for teaching, culture and others. In Indonesia, English is one of the foreign languages taught in junior high schools and high schools. Several years ago English material emphasized more on language structure, students were expected to be able to remember patterns of tenses. Too difficult for students, making students lazy to learn English.

When compared to other skills, knowledge of vocabulary is a fairly difficult skill to assess and is probably best achieved through the use of standardized commercial tests. Vocabulary mastery is knowledge in words. The crossword must be written up and down in a knowledge test where the words are. Many students enjoy crossword puzzles, which may or may not consist of new vocabulary. If people have a small vocabulary, they not only cannot understand other people's speech, but also cannot construct sentences to convey their message to others. Thus, they will understand English expressions if they have sufficient vocabulary.

Whether you realize it or not, having a great ability in mastering vocabulary is very important. Imagine, when we only learn grammar without learning vocabulary, we can't say anything. Likewise for students at school. Students who only learn grammar without vocabulary will find it difficult to convey what they want to convey at Universitas Tama Jagakarsa. The Grammar Translation method in the teaching and learning process can be used to acquire new vocabulary.

Vocabulary is needed to improve four English skills; listening, speaking, reading, and writing. This means that vocabulary plays an important role for

learning in their field of study. In my view, some high school students still have a poor vocabulary. Sometimes they don't understand what the teacher is saying. In addition, students are still difficult to communicate using English. This can make students lazy to learn English. Students pay less attention when the teacher explains the material in class. Furthermore, they were only silent when the teacher asked questions in English. So, most of the students only acquire a few vocabulary words. Researchers need to apply a method that can make students interested in learning. Most of these situations were found at Universitas Tama Jagakarsa. Most of the students did not understand what the teacher said in English and they had difficulty remembering the news vocabulary they had learned.

In improving student achievement in the teaching and learning process, the teacher has an important role. Teachers are constantly looking for important activities that allow students to improve their foreign language learning abilities. Teachers must know the condition of students. On the other hand, the method has an important role in the teaching and learning process. The method used by the teacher can make students happy in learning.

The Grammar Translation method in the teaching and learning process can be used to acquire new vocabulary. Focus on grammar, memorizing vocabulary and various declarations and conjugations, translations, texts, written exercises. Crossword Puzzle is a game that can make students feel happy in learning. The students can do both learning new vocabulary and playing games.

There are many games that can be used in the teaching and learning process. One type of game is a crossword puzzle. With crossword puzzles, students can acquire new vocabulary and improve their vocabulary. Crossword puzzles can train students' brains to remember new words. In addition, students will learn English by sharing with their friends to complete crossword puzzles.

All of the explanations above inspired the researchers to conduct action research, because the researchers wanted to find out to what extent crossword puzzles can improve students' vocabulary mastery and fulfil students at Universitas Tama Jagakarsa. Students can acquire new vocabulary and increase their vocabulary. Crossword puzzles can train students' brains to remember new words. In addition, students will learn English by sharing with their friends to complete crossword puzzles. action research reflects what some participants do, as a goal to increase rational reasoning for their actions in doing work, understand actions in depth, improve conditions in research sites, and collaboratively.

METHOD

The research subjects were grade 1 students of Universitas Tama Jagakarsa. Only one class with 26 students (11 girls and 15 boys). In this study, the authors apply the class action research method. Classroom action research begins with a question or questions about classroom experiences, problems, or challenges. It is a reflective process that helps teachers to explore and examine aspects of teaching and learning and take action to change and improve student achievement in teaching and learning.

Researchers conduct research in the teaching and learning process, so that researchers know the situation in classroom action research is small class research conducted by teachers and directed to improve learning outcomes. From the above understanding, the authors conclude that classroom action research is research conducted in the teaching and learning process to determine the state of students during the learning process.

This study applies classroom action research, Action Research along with the main steps of planning, action, observation and reflection before revising

plans, namely: planning, action, observation, and reflection

To get the data, the researcher will precede the test which consists of the Pre Test and Post Test. The function of the pre-test is to find out how far the students' vocabulary mastery is before implementing the crossword puzzle. And the function of the post test is to find out the increase in vocabulary mastery after applying the crossword puzzle. Then, researchers need documentation to determine the state of school students. Documentation includes not only official organizational letters, reports, brochures, but also much more daily work, work plans and materials.

In addition to conducting tests, researchers will conduct class observations. Observation is more than just looking and seeing. The task of observation is to be able to represent a social scene in a way that can be recognized by the actors involved, is considered valid and is a true representation of their actions. Then, field notes refer to various notes recorded by scientists during or after their observations of the particular phenomenon they are studying..

FINDINGS AND DISCUSSION

Action research consists of cycle I and cycle II. Researchers have conducted preliminary research which has been described in Chapter III. The purpose of conducting preliminary research is to find out how the teacher's method is in the teaching and learning process. So that researchers can plan the steps of each cycle in this classroom action research. In addition, researchers will show the implementation of learning that has been done by researchers.

Cycle I

Before conducting the research, the researcher prepared research instruments namely: lesson plans (as a guide for teacher activities in class, so that the teaching and learning process can be controlled); Material (text with title Air France Tail Section Restored); Crossword puzzle (used in teaching vocabulary. It consists of clues and a grid. Students will fill in the words in the grid by guessing the clues); Class observation sheets (Researchers give observation sheets to colleagues to record the learning process with crossword puzzles); Pre-test and Post-test (Pre-test is a test given to students before the teaching and learning process with crossword puzzles, while the post-test is a test given to students after the teaching and learning process with crossword puzzles). Researchers will teach students by using crossword puzzles and assisted by their partners to observe the teaching and learning process.

Observation

In the first cycle, the researcher got field notes from his partner. By monitoring student activity in this action, the teacher can see that students still have difficulty translating texts. This shows that students have less vocabulary. In addition, to find out that there is a significant increase in vocabulary, the researcher will analyse it using the t-test calculation from the Pre-test and post-test results. From the Pre-test and post-test data, the researcher wants to calculate the student's increase from the Pre-test and post-test results. The calculation uses the t-test, the process is: First, Calculate to value by preparing the result table of pre-test and post-test *to* get SD and SD_2; second, calculate standard deviation of difference between pre-test and post-test; third, Calculate *to;*

$$SD_{D} = \sqrt{\frac{\sum D^{2}}{N} - \left(\frac{\sum D}{N}\right)^{2}}$$

$$= \sqrt{\frac{115,9}{26} - \left(\frac{42,}{26}\right)^{2}}$$

$$= \sqrt{4,46 - 1,62^{2}}$$

$$= \sqrt{4,46 - 2,62}$$

$$= \sqrt{1,84}$$

$$= 1,356$$

$$t_{0} = \frac{\left(\frac{\sum D}{N}\right)}{\left(\frac{SD_{D}}{\sqrt{N-1}}\right)}$$

$$= \frac{\left(\frac{42}{26}\right)}{\left(\frac{1,356}{\sqrt{25}}\right)}$$

$$= \frac{1,62}{\frac{1,356}{5}}$$

$$= \frac{1,62}{0,2712}$$

$$= 5,97$$

Then Giving interpretation *to*, Calculate of *dfdf* = n-1 = 26-1 = 25, Consult with *t* table value. With *df* = 25, the value of *tt* with level of signification 5% is 2, 06. Comparing to with *tt* to = 5,97, therefore to is greater than *tt* with level of signification 5%.

If it is too equal or greater than *tt*, then the null hypothesis (Ho) is rejected. Ho is no significant difference between pre-test and post-test mean. T-table with n = 25 is 2.06. The result is 5.97 > 2.06, so the t-test calculation is bigger than the t-table. So, Ho is rejected, so there is a significant difference between the pre-test and post-test mean. From these data researchers can see that the average between the pre-test and post-test has a significant difference, where the post-test is greater than the pre-test. This shows that crossword puzzles have a certain influence in increasing student vocabulary, because student achievement increases after students work on crossword puzzles. This means that the crossword puzzles are in accordance with the situations and conditions of the students in learning Universitas Tama Jagakarsa's vocabulary.

After analysing the results of the actions in cycle I, the teacher can conclude that the students' vocabulary is still lacking. This is indicated by the fact that most of the students scored no more than 6, besides that students still had difficulty understanding the text. Therefore, in the next cycle, the researcher will motivate

students to get better scores on the pre-test and post-test.

Cycle II

As in cycle I, the researcher's plan was to compile: RPP (as a guide for teacher activities in class, so that the teaching and learning process can be controlled); Material (text); Crossword puzzle; sheet for class observation; Pre-test (Pre-test is a test given to students before the teaching and learning process with crossword puzzles); Post-test (a test given to students after the teaching and learning process with a crossword puzzle); and some difficult words in cycle I.

As in cycle I, the researcher will calculate the t-test using the data above to find out whether the cross word puzzle still provides a significant difference between the pre-test and post-test. The steps are: first, calculating the standard deviation of the difference between the pre-test and post-test; second, Count to; third, Providing interpretation by calculating *df* df =n-1 = 26-1 = 25; then consulted with the value of t table With *df* = 25 then the value of tt with a significance level of 5% is 2.06; and the latter is compared to *tt* to = 6.33, so *to* is greater than tt with a significance level of 5%.

$$SD = \sqrt{\frac{\sum D^{2}}{N} - \left(\frac{\sum D}{N}\right)^{2}}$$

$$= \sqrt{\frac{121,37}{26} - \left(\frac{44,1}{26}\right)^{2}}$$

$$= \sqrt{4,67 - 1,696^{2}}$$

$$= \sqrt{1,794}$$

$$= 1,339$$

$$t_{0} = \frac{\left(\frac{\sum D}{N}\right)}{\left(\frac{SD_{D}}{\sqrt{N-1}}\right)}$$

$$= \frac{\left(\frac{44,1}{26}\right)}{\left(\frac{1,339}{\sqrt{26-1}}\right)}$$

$$= \frac{1,696}{\left(\frac{1,339}{\sqrt{25}}\right)}$$

$$= \frac{1,696}{\left(\frac{1,339}{5}\right)}$$

$$= \frac{1,696}{0,2678}$$

$$= 6,33$$

If it is too equal or greater than *tt*, then the null hypothesis (Ho) is rejected. Ho is there is no significant difference between the pre-test and post-test mean. *tt* able with n = 25 is 2.06. The result for to is 6.33 > 2.06. So *to* is bigger than *t* table.

Therefore Ho is rejected, meaning that there is a significant difference between pre-test and post-test.

From the illustration above, the researcher can see that the mean between the pre-test and post-test has a significant difference, where the post-test is greater than the test. This shows that crossword puzzles have an effect on increasing student vocabulary, because student achievement increases after students work on crossword puzzles.

By analysing the results of action 2, the teacher concludes that students can improve their vocabulary, because they can answer questions better in the post-test than in the pre-test. This shows that they know the meaning of the words well, although it is still difficult to understand the text.

From the results of the analysis in cycle I and cycle II, the researcher analysed the increase in students from cycle I to cycle II. The increase is as follows: the average pre-test in cycle I was 4.31 and increased 16% to 5.81 in the post-test. The average pre-test in cycle I was 5.04 and increased by 18% to 6.81 in the post-test, the increase in students from cycle I to cycle II can be seen in the table below:

The Student's improvement in cycle I

Student's improvement	Total Students	Percentag
Increase	20	77%
Decrease	5	4%
No change	1	19%

The Student's improvement in cycle II

Student's improvement	Total Students	Percentag
Increase	21	81%
Decrease	2	8%
No change	3	11%

From the explanation above it can be seen that by using crossword puzzles most of the students increased their vocabulary. In addition, the results of the t-test in cycle I and cycle II showed a significant influence between the pre-test and post-test mean. And the results of the post-test in cycle II and cycle I are greater than the pre-test. This shows that the students' achievement in vocabulary has increased. By mastering vocabulary, students will find it easier to communicate with their friends and teachers in the learning process. Since vocabulary is a resource for understanding what people are saying, it is important in the learning process.

In this case, student progress is influenced by several factors. The first is the use of crossword media which can make students feel that there are variations in the learning process. So, they are not bored in learning English. The second factor is the method used in presenting the crossword puzzle. This is shown by the methods used with different methods in presenting TTS in cycle I and cycle II. Students find it easier to solve crossword puzzles in cycle II compared to cycle I. In this study, researchers used a game method in presenting crossword puzzles. However, he used a different procedure in cycle I and cycle II. Therefore, teachers must be creative in choosing methods that suit their students. The third factor is the students themselves. Even though the teacher is creative and uses good media in the teaching and learning process, if students do not have motivation, students will not get satisfactory learning achievements. This was shown by some students who were still passive when doing crossword puzzles, so the achievement was not optimal.

CONCLUSION

The teaching learning process by using crossword puzzle gives the positive effect in improving the student's vocabulary and the student's motivation in learning vocabulary. This is shown by the students' enthusiasm in doing crossword

puzzle and most of the students more understand what the teacher said in cycle II than in cycle I. Moreover, the student's achievement of vocabulary has improved by using crossword puzzle in teaching learning process. When we compare between pre-test and post-test, we will know that the students' score in post-test is greater than pre-test. Furthermore the result of t-test calculation in cycle I is 5, 97 and in cycle II is 6, 33. *T-table* with $n = 26$ is 2, 06. If *t-table* is same or greater than t-test calculation, so the *null* hypothesis (*Ho*) is rejected. *Ho* is rejected, therefore there is significance difference between pre-test and posttest*mean*.

It indicates that by applying crossword puzzle, the students' vocabulary has improved. It means that Crossword puzzle provide significant contribution in improving the students' vocabulary. Finally, from some statements above the researcher conclude that crossword puzzle is appropriate for the first year students of Universitas Tama Jagakarsa to improve vocabulary mastery vocabulary.

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