

THE EFFECTIVENESS OF GRAPHIC ORGANIZERS FOR TEACHING VOCABULARY OF RECOUNT TEXT (QUASI EXPERIMENTAL STUDY AT THE EIGHTH GRADERS OF SMP N 20 KENDARI IN THE ACADEMIC YEAR 2019/2020)

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INFO ARTIKEL

ABSTRAK

Diterima

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Kata kunci:

Graphic organizers;
Vocabulary; Quasi
Experimental Research

This study was conducted under the considerations of the observation in SMPN 20 Kendari that many students found difficulties in understanding vocabulary. The objectives of this study were to find out the significance of the use of the graphic organizers on vocabulary achievement and to find out whether the use of graphic organizers for teaching vocabulary of recount text is effective to the eighth graders of SMPN 20 Kendari. To gain the objectives, the writer did a quasi experimental research by using non- randomized control group pretest-posttest design. The subjects of this study were the students in class 8A and 8H of SMPN 20 Kendari. 8A was the control group and 8H was the experimental group. In this study, the writer gave the students pre-test, treatment, and post-test. The pre-test was given to both groups using the same instrument. They were asked to answer some questions of vocabulary test. The treatment was given in three meetings. The treatment in the experimental group was using graphic organizers, while the treatment in the control group was lecturing. The post-test was conducted after the treatment given to both groups using the same instrument as the pre-test but the position of question numbers were reshuffled. The result of the analysis using *t-test* showed that the experimental group got better score than the control group. In the pre-test, the average score of the experimental group was 68.87 and the control group was 68.39. In the post-test, the average score of experimental group was 83.55 and the control group was 74.52. The result of the *t-test* was 2.14 and *t-table* was 2.00. It means that the *t-value* was higher than *t-table* (2.14>2.00). In conclusion, graphic organizers were effective to improve students' mastery of vocabulary in recount text. Moreover, the writer hopes that the other English teachers would use graphic organizers as one of strategies in teaching vocabulary.

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Preliminary

There are many strategies to teach vocabulary, but not all strategies can be applied. As a teacher, we have to look at the characteristics of the students, whether it is appropriate or not. In this research, the writer focuses on the grade eight students of SMPN 20 Kendari. Based on the interview with the teacher, she added vocabulary learning when she taught a topic. They were given many unfamiliar words from a text to be learnt and memorized. The purpose was to help students to prepare their vocabulary before they were at the ninth grade for the national exam. However, during the vocabulary learning, there were some students which had difficulties in memorizing and understanding new words because they were only asked to write the words in their note. Since each student had different characteristic, some of them only wrote the words without organized their note. They also often made mistakes or errors spelling and writing words.

Graphic organizer generally consists of 5 columns or more, and has various concepts based on the function and purpose. Every concept has some contents, it depends on the purpose of the lesson. The contents can be synonym, antonym, meaning, part of speech, picture, sentence, etc. Graphic organizers can be used in variety of learning situations for individual, small group, and whole class. There are some graphic organizers that can be used for students in learning vocabulary. Every graphic organizer has different function and purpose, it depends on the grade and the characteristics of the students.

Some students have problems in memorizing and understanding the meaning of word. During the learning process, students have difficulties in defining a word when they are reading or writing a text. In comprehending a text, it is needed to have a lot of vocabularies. Not only memorizing and understanding as the problem, but also make errors spelling and writing words. Considering the importance of learning vocabulary, the writer uses graphic organizers to teach vocabulary. Graphic organizers help students to improve vocabulary by connecting a word to definition, synonym, antonym, picture, example, etc. Besides, graphic organizers also help students to organize their vocabulary note through interesting way. In this research, the writer wants to know how the graphic organizer can improve students' vocabulary.

Based on the background presented above, the writer wants to find out the answer of the following question: How significant is the use of graphic organizer for teaching vocabulary of recount text?

Based on the research question above, the purposes of this study are:

- 1) To find out the significance of the use of graphic organizer on vocabulary achievement.
- 2) To find out whether the use of graphic organizers for teaching vocabulary of recount text is effective to the eighth graders of SMPN 20 Kendari

Research methods

A. Significances of the Study

By conducting the research about the effectiveness of graphic organizers for teaching vocabulary of recount text, the writer hopes that the result of this research will be useful to give some contributions to English language teaching and learning. i.e.:

1) Theoretically

Theoretically, the result of this study is expected to be able to give some advantages for students, teachers, the writer, and other researchers and hopefully can be used as source of reference.

2) Practically

The result of this study will be useful to examine how far the students' mastery of vocabulary and as a reflection in order to increase and develop teaching vocabulary. It also motivates the students to practice more than they did before and encourage them to learn English by improving their vocabulary.

3) Pedagogically

Pedagogically, the result of this study is useful to inform the readers about the use of graphic organizers to improve students' vocabulary.

B. Hypotheses of the Study

Hypothesis 1 (H1): Graphic organizers are effective for teaching vocabulary to the grade eight students of SMPN 20 Kendari.

Hypothesis 2 (Ho): Graphic Organizers are not effective for teaching vocabulary to the grade eight students of SMP N 20 Kendari.

C. Review of the Previous Studies

There are some researchers that conduct research about strategy, technique and method to teach vocabulary. The first study was *The Influence of Mind-Mapping Strategy on Students' Vocabulary Mastery (Quasi Experimental Study of the Fifth Graders of SD Islam Bilingual An-Nissa Semarang in the Academic Year of 2013/2014)*. The aim of the study is to find out the significance of Mind Mapping strategy to improve students' vocabulary mastery. This study was conducted by using quasi experimental study with the grade five students as the population. The population consists of two samples, they were class 5B as the experimental group and class 5D as the control group. At the first meeting, the experimental and control group were given a pre-test. In the second to the fourth meetings, the experimental group was taught by using Mind Mapping strategy and the control group was taught by using Making Note strategy. In the last meeting the post-test was given to these classes. The result showed that Mind Mapping strategy made a significant difference in vocabulary achievement to the experimental group than the control group that was not taught by using Mind Mapping strategy (Romadonia, 2013)

The second study was conducted by using a game, entitled *The Use of Scrabble Game to Teach Vocabulary*. There were two objectives of this research. Firstly, the writer wanted to find out the result of teaching English Vocabulary by using scrabble game. Secondly, he wanted to find out the effectiveness of using scrabble game to teach vocabulary for the eighth graders of SMPN 1 Ngadirejo in academic year of 2013/2014. He used quasi experimental to achieve his objectives. The result of his research showed that the average score of experimental group was 81.25 and control group was 71.25. It means that the use of scrabble game in teaching and enhancing students' vocabulary is more effective than the conventional method (Putra, 2014).

The next researcher was (Hombi A, 2015) who wrote in journal which was entitled *Teaching Vocabulary with Hypermedia*. The objective of this study was to determine what effects, if any, technology integration has on the vocabulary development of middle students. The researcher identified the weak area of the sixth grade students by planning three integrated instructional activities to teach *simile and metaphor* and *Greek and Latin word roots*. The result was the responses for the technology integration activities were favorable and all of the students like using technology to learn and felt that they learn better through the use of technology.

This subchapter discusses some theories related to the topic of this study. It includes some theories about vocabulary, Graphic Organizers, and text types. Every sub subchapter consist some points to be discussed.

In this part, the writer discusses four points. The first point is the definition of vocabulary. The second point is teaching vocabulary. The third point is the mastery of vocabulary and the fourth point is testing vocabulary.

In this study, the writer will use two types of testing vocabulary, they are:

1) Multiple Choice

According to (Thornburry, 2012) multiple choices are a popular way of testing in that they are easy to score and they are easy to design. This technique is easy to mark but difficult to design. It also can be used to test single words, words in sentences or in text.

2) Cloze test

Cloze tests are usually a minimum of two paragraphs in length in order to account for discourse expectancies (H. D. Brown & Abeywickrama, 2010). They can construct easily as long as the specification for choosing and for scoring are clearly defined. According to

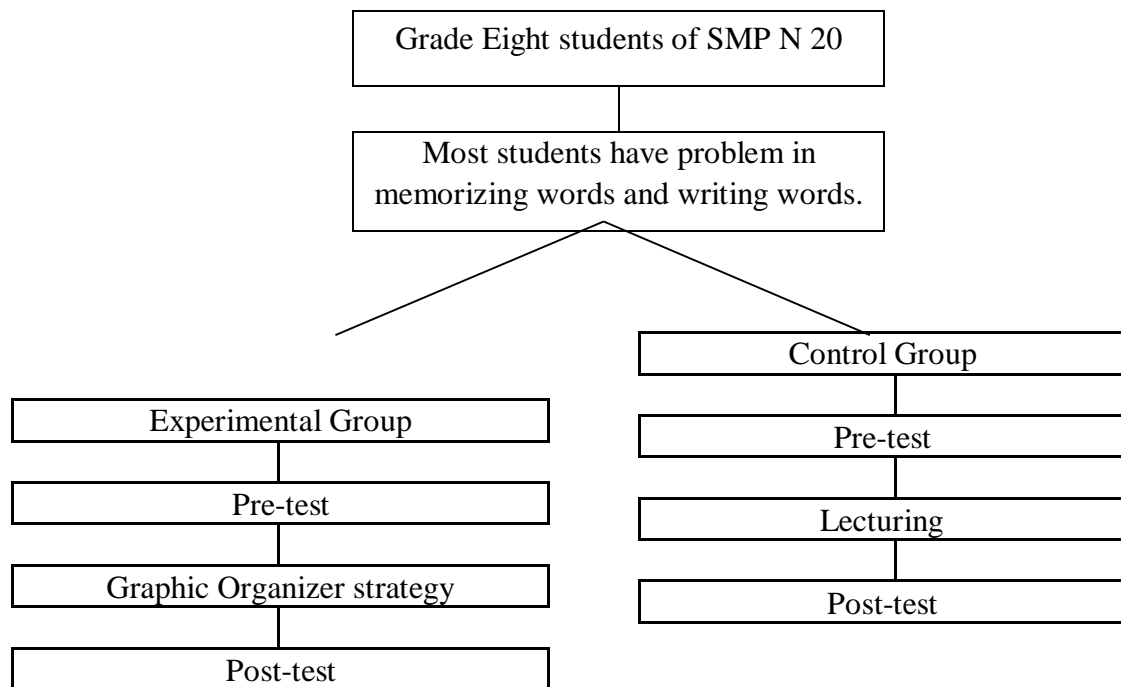
(Thornburry, 2012) in cloze test, the gaps are regularly spaced. Further, the ability to complete the gaps depends on understanding the context. There are two approaches to score the cloze test, they are the exact word method and appropriate word scoring. The exact word method will give score the test-takers only if they answer the exact word that was originally deleted. Besides, the appropriate word scoring, the test-takers supply any word that is grammatically

correct and make good sense in context (H. D. Brown & Abeywickrama, 2010).

In this part, the writer discusses five points. The first point is definition of graphic organizers. The second point is types of graphic organizers. The third point is styles and uses of graphic organizers in teaching. The fourth point is guiding principles for effective graphic organizers and the last point is how to use graphic organizers.

D. Framework of the Present Study

This subchapter discusses the framework of this study.



The theoretical framework started from the idea that vocabulary is one of important aspects in English learning. Students need to succeed in mastery vocabulary because it is important to learn vocabulary to enhance their English skill. Based on the observation and the interview with the teacher, students have problem in memorizing and understanding words. Most of them do not know how to explore and organize the words using appropriate strategy. Thus, the writer conducted quasi experimental study. Since the participants of this study are eighth graders of SMP N 20 Kendari, the writer used graphic organizer strategy. This strategy is appropriate for students because it is an easy and an interesting strategy.

E. Method Of Investigation

In this research, the writer conducted a quantitative research. The method in this investigation that the writer used was a quasi experimental, that is non-randomized control group pretest-posttest design. Pre-test was given to both the control and experimental group at the eighth graders of Junior High School 20 Kendari to measure the condition before treatment. Next, the treatment was given

to the experimental group by using graphic organizers while the treatment of the control group was given by lecturing. After conducting the treatment, the test is given to both groups as the post-test.

There were eight classes in the eighth grade of SMP N 20 Kendari. They were 8A, 8B, 8C, 8D, 8E, 8F, 8G, and 8H. Before the writer chose two classes as the experimental and control group, she collected the data of average score of English examination. Based on the data, the eight classes were equal. It can be seen on the homogeneity of the students' score. Therefore, the writer chose simple random sampling to split the subject of this study. The teacher considered that the writer could choose 8A as the control group and 8H as the experimental. She considered those classes because the both classes have nearly similar score.

(Creswell & Creswell, 2017) "A variable refers to a characteristic or attribute of an individual or an organization that can be measured or observed and that varies among the people or organization being studied". There are two variables in this experimental research:

1. Independent Variable

(Nist, 2012) described that "independent variable is a label given to the variable that the experimenter expects to influence the other". In this study, the independent variable is graphic organizers as a strategy for teaching vocabulary.

2. Dependent Variable

(Creswell & Creswell, 2017) stated that "dependent variables are those that depend on the independent variable; they are the outcomes or results of the influence of the independent variable". The dependent variable of this study is students' achievement in vocabulary test.

F. Instrument of the Study

An instrument is a tool to gather data of the study. The instrument used in this study is a test. Therefore, the role of the test is important in collecting data. This is related to the Brown's opinion that test is a method of measuring a person's ability, knowledge or performance in a given domain (J. D. Brown, 2018) In this study, the test given was observation, questionnaire, and vocabulary test. There are so many ways to test vocabulary, such as multiple choice, cloze test, matching items, set items, and others.

1. Vocabulary Test

In this study, the writer used two the objective tests in the form of multiple choice and cloze test since it is easy to score and administer.

2. Questionnaire

Questionnaire is participants' answer in end of course to find out their opinion about the strategy, the strength and the weaknesses of graphic organizers, and what students had learnt from the text they discuss. This instrument was analyzed to support the effectiveness of graphic organizers after the treatment was conducted. There are 10 questions in the questionnaire, each question consists of three choices, they are disagree, agree, and strongly agree.

G. Procedures of Collecting Data

In collecting data, the writer followed some procedures, such as, doing try-out, giving pre-test and post-test.

1. Try-Out

A good or bad quality of the data is obtained based on the instrument used to collect the data. Good instrument must fulfill important qualification, those are valid and reliable. To know whether the test is valid and reliable, it had been tried out first to the students in other class beside experimental and control class.

There are 31 students as the respondents of the try-out test. They have to answer the multiple choice test consisting of 20 items and cloze test consisting of 5 items. The students have to complete the test in 45 minutes and will get score 100, if all questions are answered correctly.

a. Validity

The validity computation is consulted to the r_{table} of Product Moment by determining the significance level 5% and n which is according to the data. The instrument is valid if the $r_{xy} > r_{table}$ for $\alpha = 5\%$ and $N = 31$.

b. Reliability

In order to know the level of reliability, the result must be consulted to the table of product moment with the number of participant is 31 students and significance level is 5%. If the result of r_{11} is higher than the „ r “ product moment, it can be said that the instrument is considered as reliable.

2. Pre-Test

Pre-test is an observation done before the experiment or treatment. A pre-test in this study has purpose to know the initial students' vocabulary mastery. For the pre-test, the writer will give the students a vocabulary test in the form of multiple choice and cloze test. The first part is multiple choice and the second part is cloze test which students are asked to answer all questions correctly.

3. Treatment

The treatment will be given after the pre-test is conducted. For the experimental group, the graphic organizers will be used as the strategy to learn vocabulary. Traditional method will be used for the control group in teaching vocabulary.

First, the experimental group will be given a topic about recount text. The writer uses three kinds of graphic organizers. In first meeting, the writer will ask the students to find some unfamiliar words. The students apply first graphic organizer (synonym wheel) when learning the vocabularies. In the synonym wheel, the students find the synonym of unfamiliar words and make a sentence for each word. In second meeting, venn diagram will be taught to compare two recount texts or to compare the experience of two students. In the last meeting, the writer uses concept circle.

4. Post-Test

The post-test has the purpose to know the students' ability and achievement after getting the treatment. The post-test will be given after the students get the treatment to both experimental and control group. The test is similar with the pre-test, in the form of multiple choice and cloze test, but the question numbers will be reshuffled.

H. Technique of Analysis

After collecting the data, the writer processes them statistically and then analyzed the score to measure the students' improvement and achievement. The steps which are followed, such as, analyze the scoring technique, normality, homogeneity, and then using *t-test*.

1. Scoring Technique

In the scoring technique, each student who answered correctly will get score 1 and who answered incorrectly will get score 0.

2. Normality

The normality is used to prove whether pre-test and post-test of each group is normally distributed. First, the maximum score and minimum score of both groups are calculated. Then, the range score, class interval, and class width are determined. After that, χ^2 hitung is found. If the value of χ^2 hitung $<$ χ^2 (α)(dk), the pre-test of each group is said to be normally distributed.

Results and Discussion

A. Try-out Analysis

The try-out test was conducted to find out the validity and the reliability of the instrument before it was used as the instruments of the test. This test was conducted on September 11, 2015. It was held in out of the classes under investigation. There were 31 students in that class. The try-out test is available in Appendix 1.

1. Validity

As mentioned in the third chapter, the test is said to be valid if the result r_{xy} are greater than r_{table} . The data was calculated by using Person Product Moment and the result showed that the index validity of item number 2 was 0.722. Then the writer consulted the table of r with $N = 31$ and significance level 5% in which then r_{table} is 0.343.

2. Reliability

A good instrument has to be valid and reliable. The test is reliable if the result of r_{11} is greater than r_{table} . In this computation, the writer used Kuder-Richardson formula number 20 (KR20) and the result showed that the r_{11} was 1.060 for $\alpha = 5\%$, $N = 31$, and the r_{table} was 0.343.

3. Difficulty Level

The difficulty level is counted to know the level of the test items. If the index of item difficulty is high, it is considered the item is easy. If it is low, it will be considered to be difficult.

4. Discriminating Power

Discriminating power will measure how well the test items arranged to identify the differences students' competence. The following is the computation of discriminating power of item number 2

B. Pre-test Analysis

The pre-test was conducted on September 15, 2015 for the control group and on September 16, 2019 for the experimental group. This pre-test was held in the first meeting and was conducted to know the initial condition of students' achievement in vocabulary test. The students were asked to answer 20 questions in 40 minutes. The instrument can be seen in Appendix 10.

1. Homogeneity of the Pre-test of Experimental and Control Group

The computation of homogeneity was needed to find out the similarity of both experimental and control group in their English vocabulary achievement. If the results of homogeneity of experimental and control group are not homogeny, the treatment cannot be conducted because homogeneity influences the test result and they do not have the same ability in vocabulary achievement.

2. Normality of the Pre-test of the Experimental Group

The normality was counted to know whether the group is normally distributed. If the scores are not normal, the treatment cannot be conducted because they do not have same average in vocabulary achievement. Based on the data of normality, the χ^2 value of pre-test of experimental group was 2.86. Besides that, the computation of χ^2 table was $\chi^2_{(\alpha)(dk)} = \chi^2_{(5\%)(3)} = 7.82$. It showed that the χ^2 value $<$ χ^2 table then pre-test score for experimental group was said to be normally distributed. The complete computation of normality can be seen in Appendix 15.

3. Normality of the Pre-test of the Control Group

Based on the data computation, the normality of pre-test of control group showed that the χ^2 value was 7.65. Then, the writer computed the χ^2 table. The computation of χ^2 table was $\chi^2_{(\alpha)(dk)}$ with $\alpha = 0.05$ and $dk = 3$. Since the data of normality (χ^2) was lower than the χ^2 table ($7.65 < 7.82$), the data were considered to be normally distributed. The computation of normality can be seen in Appendix 16.

4. Treatment Activities

Treatment activity was conducted after the pre-test was given to the experimental and control group. Each group was given the treatment for three times in three meetings. For the experimental group, the treatment was given by using graphic organizers. For the control group, the treatment was given by lecturing.

C. Post-test Analysis

The post-test was held after the treatment given. The post-test for control group was conducted on October 20, 2019 and the post-test for experimental group was on October 21, 2015. The post-test consisted of 20 questions. The writer used the same question as the pre-test, but the question numbers were reshuffled.

1. Homogeneity of the Post-test of Experimental and Control Group

Before the *t-test* was computed, the homogeneity of the post-test of both experimental and control group had to check. The homogeneity of the post-test was important since it influenced the *t-test* result.

2. Normality of the Post-test of the Experimental Group

The normality of the data should be checked before the writer counted the *t-test*. If the scores are not normal, the *t-test* cannot be counted because they do not have same average in vocabulary achievement.

Based on the data of normality, the X^2 value of post-test of experimental group was 5.09. Besides that, the computation of X^2 table was $X^2(\alpha)(dk) = X^2(5\%)(3) = 5.99$. It showed that the X^2 value $< X^2$ table then post-test score for experimental group was said to be normally distributed. The complete computation of normality can be seen in Appendix 18.

3. Normality of the Post-test of Control Group

Based on the data computation, the normality of post-test of control group showed that the X^2 value was 5.77. Then, the writer computed the X^2 table. The computation of X^2 table was $X^2(\alpha)(dk)$ with $\alpha = 0.05$ and $dk = 3$. Since the data of normality (X^2) was lower than the X^2 table ($5.77 < 5.99$), the data were considered to be normally distributed. The computation of normality can be seen in Appendix 19.

4. T-test Statistical Analysis

The result of the *t-test* became the proof whether the difference of pre-test and post-test mean of both groups was significant. However, the standard deviation should be counted first.

D. Questionnaire Analysis

The writer gave the participants a questionnaire after the treatment was conducted. The questionnaire was given to the experimental group who got the treatment (Graphic Organizers). The questionnaire was analyzed by determining the score for each choice, disagree was 1, agree was 2, and strongly agree was 3.

After the writer calculated the all scores, she found that the highest score of the effectiveness of graphic organizers was 72.04% in the question number 10 and the lowest percentage of the effectiveness of graphic organizers was 65.59% in the question number 6. Base on the calculation, it can be concluded that 72.04% of the participants agree that graphic organizers helped them in understanding

recount text and only 65.59% of the participants agree that graphic organizers facilitated them to make a sentence.

E. Discussion of the Research Findings

This study is meant to answer the research problem. It was to find out the effectiveness of using graphic organizers for teaching vocabulary of recount text for the eighth graders of SMPN 20 Kendari in the academic year 2019/2020.

From the result of the mean score of pre-test between the two groups, the writer found that the mean score almost have the same average score. In the pre- test, the mean score of the experimental group was 68.8 and the control group was 68.4. Based on the result of mean score of pre-test, it could be seen that there is no significant difference in their vocabulary achievement.

Another result of the computation shows that the result of t-value is 2.14 and t-table is 2.00. It can be seen that $t\text{-value} > t\text{-table}$. The conclusion is there is significant difference between the students' achievement in vocabulary. Therefore, the hypothesis stating that „Graphic organizers are effective for teaching vocabulary to the grade eight students of SMPN 20 Kendari.“ is accepted.

Another result which supported the other computation is the calculation of questionnaire. The computation of questionnaire shows that 91.40% of participants like to learn English, 72.04% of participants agree that graphic organizers help them in understanding recount text, and only 65.59% of participants agree that graphic organizers facilitated them to make a sentence. Based on the result, it can be said that graphic organizers are effective for teaching vocabulary, especially understanding recount text.

Conclusion

Based on the investigation of chapter IV, the conclusions can be stated that graphic organizers make a significant difference in vocabulary achievement for grade eight students by calculating the t-test (2.14) which is higher than the t-table (2.00). Graphic organizers are effective as a strategy in teaching vocabulary for grade eight students of SMPN 20 Kendari in the academic year 2019/2020. Based on the research, graphic organizers are more effective than lecturing in improving the students' active vocabulary. Graphic organizers can be used for individual or group and can be used to help students organizing their note.

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