THE USE OF JIGSAW II TO ENHANCE THE STUDENTS READING COMPREHENSION IN THE FIRST GRADE OF PAPUA SENIOR HIGH SCHOOL

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Abstract - Reading is the indispensable material in learning language. However, the teacher's method is considered traditional and many students have the problem in comprehending a text. The purpose of this study to enhance the students' reading comprehension focused on narrative text at first grade of senior high school. It employs a quasi-experimental of control group time series design utilizing three steps to run this research as pretest, treatment and posttest to obtain data from 35 students is taken by using purposive sampling. The result of this research concludes that null hypothesis is rejected, because it requires the examining criterion statistic calculating, hence the null hypothesis is rejected or alternative hypothesis is received. Thus it could be concluded that the result of learning process of Jigsaw II in experimental class is better compared with the result of control class. These imply that Jigsaw II method is the beneficial alternative method to teach reading comprehension and will help the students improve their reading comprehension at the First Grade of Papua Senior High School

Keywords - Reading comprehension, Jigsaw II method, Narrative text.

I. INTRODUCTION

Reading is very important for all of people including the students, because by reading we can find a lot of information. The students want to study one of language skill must be mastered is reading skill, because by reading the students are able to comprehend the texts and it will bring them to master other skill of English language.

Sometime the students just memorize what already have they read of a text but the students cannot to comprehend about the meaning. They think that by reading they can get four skills of English language. Whereas by reading students can get a lot of vocabulary used in speaking skill and by reading students can know how to write well because after students read a text they have to watch some of words and vocabulary to help them write something. When they are asked what they have just read, they are unable to respond. Although they get high score in terms of reading rate or fluency, they are not really good readers. A good reader is someone who has a purpose for reading, whether it is looking for specific information or to read for pleasure.

Basically, the goal of reading understands to connect the ideas on the page to what you already know. There are multiple reasons why some students have difficulty with reading comprehension. Some students have difficulties because they have not truly mastered reading fluently. When a student who is struggling to read words and focuses so hard on just saying the words correctly, they are not focusing on what they are reading, so that student is still less to comprehend the text. There are multiple reasons why some students have difficulty with reading comprehension. Some students have difficulties because they have not truly mastered reading fluently. When a student who is struggling to read words and focuses so hard on just saying the words correctly, they are not focusing on what they are reading, so that student is still less to comprehend the text.

Reading comprehension is a highly interactive process that takes place between a reader and a text. It means that reading has a strong relevancy between the reader and a text. The teacher must prepare some of methods, strategy and technique to use in teaching and learning process. It needs much time to finish reading activity. The English teacher has to pay attention about this problem.

Sometimes, the reader is still confused to conclude the meaning because the total of a text is much to read, so that it makes a reader has to be slowly to read a text. So, the researcher will try to use Jigsaw II method that developed by Slavin which have been adapted by Elliot Aronson et all (1978) to teach reading focus on student's comprehension.

Nagraj et al (2012) explained that the Jigsaw method was developed by Elliot Aronson to promote active learning and cooperation in the classrooms. Later Robert Slavin made some alteration in the Jigsaw method and named the new method as Jigsaw II the students study in group felt enjoyment and to encourage the whole students in the class to work together and to provide the change in working pattern. Most of students were interested in studying in groups.

Jigsaw II is one of cooperative learning has been viewed as the solution for educational problems. In Jigsaw II have enhanced some of educational problems likes the lack of students motivation in studying and also in Jigsaw II helps the students to comprehension the kinds of text in reading skill and the other subjects. In this research, the researcher

conducted the research that used of Narrative text by using Jigsaw II method.

Narrative text is a text which contains about story (fiction/ nonfiction /tales/ folktales/ fables /myths /epic) and it is plot consists of climax of the story (complication) then followed by the resolution. In teaching reading comprehension the researcher intended to use the kind of narrative text to measure how deep the effectiveness of this method and how deep the comprehension of the students when they are reading a text.

Based on the explanation above, the researcher intends to conduct the research focused on teaching reading comprehension on narrative text by using Jigsaw II method. So that, the researcher conducts the research entitled "The Use of Jigsaw II Method to Enhance the Students' Reading Comprehension at The First Grade of senior high school

II. LITERATURE REVIEW

Arinata (2011) has conducted the research focusing on improving reading ability by using Jigsaw II technique. He found that, cooperative learning of Jigsaw II technique will improve the students reading ability, because it is a learning of technique source on constructive theory that expect a student to develop his knowledge. To teach English language in perspective of constructive is not for transferring knowledge, but to teach English language to give and to organize the circle learning for students can motivate to excavate their knowledge.

Rachmawaty (2012) has conducted the research focusing on improving students' reading comprehension on descriptive text by using jigsaw II technique, the researcher states that the students had improved their reading comprehension on descriptive text from each aspect of comprehension. Jigsaw II technique does not only help the students in improving reading comprehension, but also build character such as cooperation, diligence, and responsibility. The technique also teaches the students how to be responsible on the material when all of students have to share the material to their friends.

Ikhlas et al (2009) who posted the research focusing on students' ability in comprehending descriptive text using application of Jigsaw II, as the result that Jigsaw II method is effective in improving the students' ability incomprehending descriptive texts. In other words, students' ability in comprehending descriptive texts was improved after applying Jigsaw II method. In addition, the researchers stated that the teacher needs to find interesting materials before conducting the teaching and learning process, so the students can enjoy the lesson. Besides, the teacher also should be more creative in teaching and learning process, and also Jigsaw II can be effectively adapted for use across most subjects and grade levels, but in this study, the writer will use it to increase the students' reading comprehension ability. This is one of cooperative learning methods that was developed by Slavin (1986), having adapted by Aronson's Jigsaw technique (1978). The Jigsaw II method helps students become active participants by sharing what they have already discussed in expert group to other members in their home groups. The Jigsaw method gets its name because each student is a vital piece of the overall puzzle that is the learning task. Students are first divided into groups and assigned various portions of the material to become an expert on.

Nagaraj and Thamba (2012) have conducted the research focusing on developing students' reading comprehension, as the result that the Jigsaw II is a modification of the original Jigsaw method that includes two important changes. First, all team members read the entire lesson to be learned rather than only one part. Second, as with the other methods of Slavin, individual improvement scores combine to contribute to an overall team scores. The rest is the same with the original part of the Jigsaw. Students become expert on one aspect of the lesson, meet in expert groups and help others to learn the material.

Based on the previous studies exposed that the Jigsaw II can improve the students' motivation in learning process and also Jigsaw II in teaching reading comprehension can improve students' comprehension of a text. It means that, Jigsaw II was applicable and effectively to be used in enhancing students' reading comprehension. In this research the researcher intends to conduct the research by using of Jigsaw II in teaching reading comprehension on narrative text. In previous studies of the research have ever used the descriptive text to teach reading comprehension by using Jigsaw II and in this research the researcher has conducted the research by using narrative text to measure the students' comprehend in reading that used of Jigsaw II.

III. SOME PERTINENT IDEAS

3.1 Definition of Jigsaw II

Slavin (2005) defined that teaching method by using original Jigsaw was developed by Elliot Aronson et al (1978). In Jigsaw II method, students work in group was heterogeneous, such as in STAD and TGT methods. The teacher gave a task for students to read for some units or chapters, and the teacher gave "an expert sheet" that consisted of different topics it must be focused of attention for each student in group when students read it. After all of students have done to read, the students of different group that have focused on same topics to meet in "expert group" for discussed their topic as long as thirty minutes. Then, the experts were returned to their team groups and to teach their friends in group as returned about their topics. The last was the students received the assessment that included all of topics and the score quiz would be a score team, such as in S.T.A.D.

By using the steps of Jigsaw II the students were motivated to learn the subject well and to work hardly in their expert team for the students can help their team for did the task well. According Slavin (2005), the key of Jigsaw method is interdependency: each student expects to his/her group-mates can to give the information that required for can work ability during do research.

According to Nagaraj et al (2012) explained that The Jigsaw II strategy is an efficient strategy to use in a language classroom. The basic activities include 1) Reading with team members 2) Expert group discussion 3) Team members report 4) Test 5) Team recognition. The jigsaw II strategy is easy to implement and works well with a wide range of students.

3.2 Learning activities in Jigsaw II

Slavin (2005) found that, Jigsaw II consists of regular cycle of learning activities, follow as:

1. Reading

The students received the expert topic and to read the material that asked to find the information. The first activity in Jigsaw II is to distribute the text and the expert topic and dividing every topic for all of students, and then reading. If in home group consist of five students, it must give the one topic for two students to do together.

2. Discussion of expert-team

The students meet with the same expertise to discuss their topic in expert group. It makes for the students with the same expert topic (e.g. topic number one to meet on the one table, the expert topic number two to meet on their table and the other numbers.

3. Team reporting

The expert (student) is return in their own group to teach their topics for their group mate. The students have to take about five minutes to study all of their topics and from the discussion in expert group.

4. Test

The students do the individual quiz that included all of topics. Ask for the students to change the quiz sheet with the other members group to calculate the score.

5. Group recognition

The team score calculate likes in STAD. According to Slavin (2005) was stated that, the calculating of score for Jigsaw II same with the calculating of score in STAD, including for the first score, the improvement scores, and the procedure of calculating score. As in S.T.A.D, the certificate or the appreciation gave in the recognition the teams are success.

IV. DEFINITION OF READING COMPREHENSION

Rites (2013) stated that, reading comprehension is a multicomponent complex process that involves many interactions between the reader and what she/he brings to the text (previous knowledge, strategy used), as well as variables related to the text itself (interest in the text, understanding of the types of texts).

Baier (2005) explained that, reading comprehension is a skill that as critical in the educational success of all individuals. Without adequate reading comprehension skills, students can struggle in many subject areas. Reading comprehension is a key element to increasing reading scores.

Meneghetti (2006) stated that, reading comprehension is a complex cognitive ability requiring the capacity to integrate text information with the knowledge of the listener/reader and resulting in the elaboration of a mental representation.

4.1 The Components of Reading Comprehension

Ikhlas et al (2009) stated that there were five components of reading comprehension may help the students to read carefully:

1. Finding factual information

Finding factual information is one component of reading comprehension that is suitable for elementary school students. Factual information requires readers to scan specific details. The factual information questions are generally prepared for students and those, which appear with WH question word. There are many types of questions: reason, purpose, result, time, comparison etc in which of the answer can be found in the text.

2. Finding main ideas

Recognition of the main idea of a paragraph is very important because it helps you not only understand the paragraph on the first reading, but also helps you to remember the content later. The main idea is not only in the beginning of the paragraph, but also in the middle and at the end of the paragraph.

3. Finding the meaning of certain word

The readers could develop his/her guessing ability to the word which is not familiar with him or her, by relating the close meaning of unfamiliar words to the text and the topic of the text that is read. The words have nearly equivalent meaning when it has it or nearly the same meaning as another word. In the other word, the students are expected to 87 be able to form and understand the meaning.

4. Identifying references

In English, as in other language, it would be clumsy and boring to have and repeat the same word or phrase every time you use it. Instead of repeating the same word or phrases several times, after it has been used we can usually refer to it than repeat it. For this purpose, we use reference words. Recognizing reference words and being able to identify the word to which they refer to will help the reader understand the reading passage. Reference words are usually short and very frequently pronoun, such as; it, she, he, this, etc.

5. Identifying inferences

Inference is a skill where the reader has to be able to read between lines. King and Stanly divide into two attentions, draw logical inferences, and make accurate prediction.

Based on the explanation, the theoretical framework could be visualized as follow:

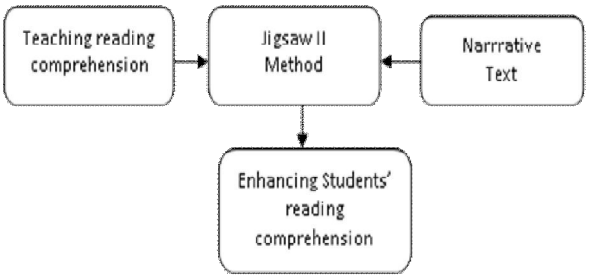


Figure 1: Conceptual framework

There were two hypotheses which were formulated in this research. They were Null Hypothesis (H0), and Alternative Hypothesis (H1). H0 stated that the use of Jigsaw II method does not enhance the students' reading comprehension, and H1 stated that the use of Jigsaw II method to enhance student's reading comprehension. In this research the researcher aimed to prove of Alternative Hypothesis (H1) that used of Jigsaw II method can enhance student's reading comprehension.

V. RESEARCH METHOD

In this research, this research uses quantitative method with experimental research. Darmadi (2011) stated that, the experimental research is one of the research methods that are valid examined the relation of hypothesis about cause and result. Experimental research consists of two variables such as dependent variable and independent variable. This researcher uses Jigsaw II as independent variable that influenced reading comprehension as dependent variable. This research applies quantitative method with quasi experimental design. This researcher uses quasi experimental design of control time series design, because quasi design has two groups that functioned as control group and experimental group (comparative time series design) and also the determination of subject research was not randomly.

The design is as follows:

Where:

K1 = experimental group
K2 = control group
T1 = pretest
T2 = posttest
X = Treatment

(Setiyadi, 2006)

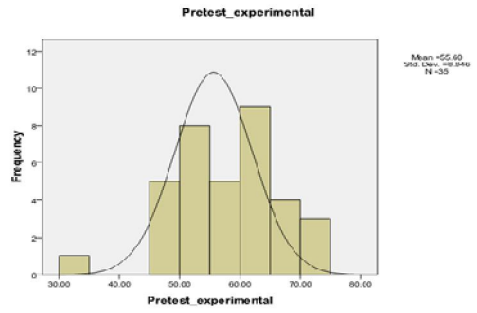
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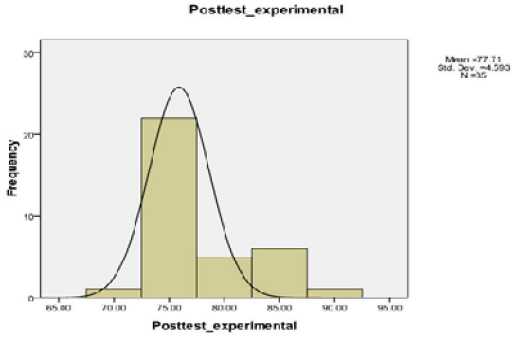
The chapter would be discussed about the results of research that showed improving students' reading comprehension by using jigsaw II method. Before the researcher conducted the research, firstly the researcher did the observation toward the process of English learning in the first grade, determining the class that given the action of Jigsaw II method, determining the material, arranging the lesson plan, and the researcher arranging the test.

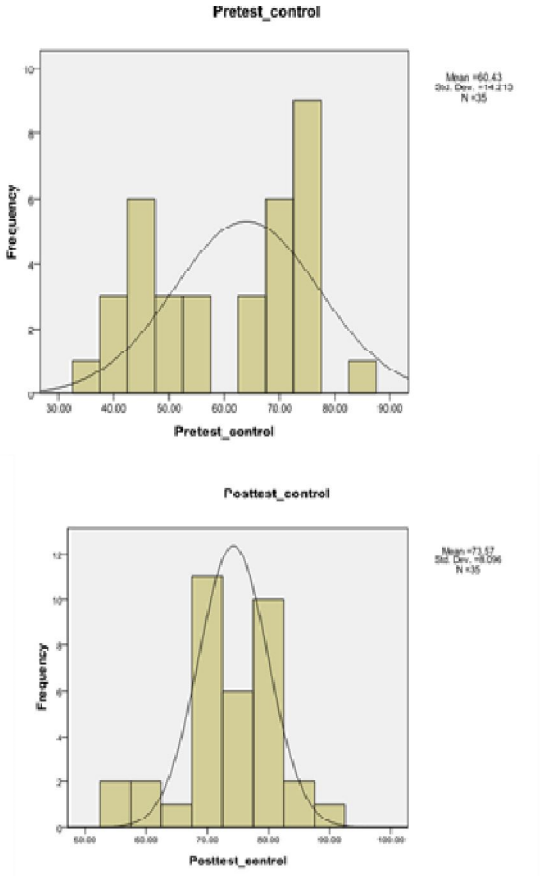
In this research the researcher used the experimental method. The researcher put the sample of the research into two classes and one of the classes has given the special action. The action gave in this research was cooperative learning of Jigsaw II method. The researcher used two groups that consist of experimental class and the control class. The researcher determined the class from the result of pretest from both of class. The pretest has done before the researcher gave the treatment by using Jigsaw II method in teaching reading comprehension, while the researcher has done the posttest after the researcher gave the treatment by using Jigsaw II method in teaching reading comprehension. The tests were aimed to collect the data of the students' reading comprehension scores. The researcher has taken the results of the test from the two groups. The results were analyzed by using SPSS 17.0

The researcher got the score of the students from the experimental class and the control class. The total score of pretest from control class is 2115 and the total score of posttest is 2575. The mean of control class from pretest is 60.4 and the posttest is 73.5, while the total score of pretest from the experimental class is 2115 and the total score of posttest was 2720. The mean of experimental class from pretest was 55.6 and the posttest was 77.7.

The result of the tests has shown that there were an increasing score of mean pretest and posttest from the experimental class.







Mean score and Distribution of Normalization Test

Class	Mean (Gain)
Control	0.42
Experimental	0.61

Table 1: The Data of Mean Score

From the table above, the mean score of control class was 0.42 and the mean score of experimental class was 0.61.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Experimental	.123	35	.196	.973	35	.542
Control	.092	35	.200*	.983	35	.859

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Tabel 2: Distribution of normality test

Based on the result output test normalization by using Shapiro – Wilk on the table 6 the data significance of mean score for experimental class was 0.542 while the significance score of control class was 0.859.

Homogeneity test and T-test

ndependent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference	
Lesson Plan	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	.720	.399	3.859	68	.000	.19103	.04951	.09224	.28981
Equal variances not assumed			3.859	66.970	.000	.19103	.04951	.09221	.28984

DISCUSSION

The researcher determined two classes in this research, they were experimental and control class. In this research, the researcher chosen the sample used the purposive sampling. The researcher got the result from both of classes and then the researcher determined that the experimental class and the control class.

The researcher gives the treatment by using Jigsaw II method for the experimental class and the researcher used the communication approach for control class. The researcher applied the steps of Jigsaw II method such as reading, discussion of expert group, the report team, and the test. After that the researcher gave the posttest for both of classes. The control class got the total score of posttest was 2575 while the experimental class got the total score of posttest was 2720. It means that the influence of Jigsaw II method for the experimental class was success to improve the students' reading comprehension.

After the researcher got the total score of pretest and posttest from both of classes, the researcher found the mean score from both of classes that were differences. The researcher gets the mean score 60.4 and in the mean score of posttest 73.5, while in the experimental class the researcher get the mean score of pretest 55.6 and the mean score of posttest 77.7. The researcher processed the data of mean score or gain score to get the normalization of the test, the homogenity the test and the result of t-test. The all process used the mean score or that mentioned as gain score.

The researcher got the data in this research was the data which distribution of normalization and it has the same variances, and it could be examined use the similarity by t-test. The data significance of normality score for control class was 0.859 while the significance score of control class was 0.542. The significance score from both of classes' ≥ 0.05. Based on the criteria of hypothesis from distribution normalization test of H0 was accepted and H1 was rejected. It means that the sample from both of class have come from the population was distribution of normalization.

The researcher conducted the homogenity test. The result of homogenity test explained that hypothesis of H0 was accepted because it has seen based in the score of significance from both of classes in lesson plan was 0.399. The achievement of the significance

score was bigger than 0.05; and Fcount from lesson plan, the researcher got the score 0.720 for the level of significance was 0,005 with dk(enumerator) = 2-1 = 1 and dk (denominator) = 70 – 2 = 68, the researcher got Ftable = 3.98, because Fcount<Ftable, it means that the group was homogeneous and the researcher could be concluded that both of classes were experimental and control have the same variance (homogeneous).

The researcher conducted the accounting by using t-test and the researcher got the result that based on the table 2, it was shown that the significance score (sig 2-tailed) by using t-test was 0.000, because the significance score was shorter of 0.05, it means that the criteria of taking the determining of H0 was rejected. It has shown that the result of learning process about reading comprehension from both of classes was difference as significance. The researcher got t-count was 3.859 and ttable was 1.99547 with the probability is 0.05 and df (degree freedom) = n1 + n2 – 2 = 68 (in appendix sheet). Based on the test of criteria that H0 was accepted if the score of t-count < t-table, because tcount> t-table were 3.859 > 1.99547, it means that H0 was rejected and H1 was accepted. The researcher could be concluded that the result of learning English from the students of both of classes were difference as significance and it could be concluded that the result of students' reading comprehension from experimental class was improved by using Jigsaw II method. This method is an alternative way in teaching and learning process because this method can help the students more active and motivate to express their own ideas

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