

**THE COMPARISON OF STUDENTS' WRITING DESCRIPTIVE TEXT
ABILITY BY USING JIGSAW AND SCAFFOLDING TECHNIQUE
IN EVEN SEMESTER AT GRADE X STATE
SENIOR HIGH SCHOOL 1 SEPUTIH RAMAN
ACADEMIC YEAR 2012/2013**

by

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Abstract : Writing as one of the four skills has always been as a part of the syllabus in teaching of English. The techniques presented as a solution in this research about writing ability are Jigsaw and Scaffolding technique. There are three problems of the study, (1) Is Jigsaw technique effective to improve students' writing descriptive text ability? (2) Is Scaffolding technique effective to improve students' writing descriptive text ability? (3) Is there any significant difference of students' writing descriptive text ability by using Jigsaw and Scaffolding technique? The objective of this research is (1) To know whether Jigsaw technique is effective to improve students' writing descriptive text ability. (2) To know whether Scaffolding technique is effective to improve students' writing descriptive text ability. (3) To know whether there is any significant difference of students' writing descriptive text ability by using Jigsaw and Scaffolding technique. The method of investigation is held through quantitative experimental research. The researchers uses modified pretest-posttest control group design. In this experiment, the employees control group pre test post test design. The researchers is conducted at the grade X of State Senior High School 1 Seputih Raman in academic year 2012/2013. The population in this research is 210 students. It is consist 7 classes and each class consist 30. The researchers takes 90 students from total population as the sample. 30 students as experiment class of Jigsaw, 30 students as experiment class of Scaffolding, and 30 as control class that matching based on classification of student level. And the researchers use cluster random sampling as technique sampling. To analyze data, the researchers uses One Way ANOVA. The researchers got the result of $F_t 1\% = 7.31$ and $F_t 5\% = 4.08$ and it seems that $F_o > F_t 1\%$ and $F_t 5\%$ in which $F_o = 7.31 > F_t 1\% = 7.31$ and $F_t 5\% = 4.08$. The criteria of One Way ANOVA is $F_o \geq F_t 1\%$, H_a is accepted. So, there is any difference result of students' writing ability using Jigsaw and Scaffolding technique. Jigsaw technique is more effective than Scaffolding technique toward students writing descriptive text ability at the grade X of State Senior High School 1 Seputih Raman academic year 2012/2013. The suggestions are to raise the students' writing descriptive text ability, it uses Jigsaw technique in writing instruction. The students must be fun and enjoy in using Jigsaw technique.

Key words: Comparison, Jigsaw, Scaffolding, Writing Descriptive Text Ability

Introduction

Writing is one of skills must be mastered by students. It is included in Standard Competence and Basic Competence of English lesson for Senior High School. Purpose of English for Senior High School is to improve communication competence to achieve informational literate. It means that the students are able to access knowledge and language

competency, one of them is writing. Some scopes of English for Senior High School are competency to follow and create short functional text, monolog, and essay.

This causes a consequence in that the students must comprehend writing skill before doing writing itself. There are some genres of text included in writing, but the easies one is descriptive text. The text has function to describe something,

somebody, place, etc. It seems not difficult to make this genre. Everything has the characteristics, for example a person. It can be described by telling her/his body, skin, hair, face, etc. Describing a place is not too difficult. Telling whatever in the round of the place, such as the view, position, and stuff, can be used to make a descriptive text.

Making a descriptive text is easier than the other one, however: students think that it is difficult to do. If teacher asks them to create the text, most students search it in the internet and copy it. It is simple way for them. However, the problem appears here. Writing is difficult skill to comprehend, especially descriptive text. It can be caused by some reasons. For the first is teacher uses wrong teaching technique. The teachers do not know many techniques, such as Jigsaw and Scaffolding. It makes students feel bored. Teaching technique is important to explain the material. Therefore, the students get the point of the materials and improve the materials well. Teaching writing needs suitable technique to make students know how to write well and easily.

Both researchers found out that the students feel that writing is too difficult. It makes them to write instantly by using internet as the facility. The difficulties appear because they do not understand about descriptive text materials well. They do not have enough knowledge or information about it and how to create the text easily. It means that the explanation of the materials is not clear. The other matter is the students do not get enough drill how to create a descriptive text well. There is no enough time to drill students to create descriptive text. Therefore, the result of creating descriptive text of senior high school is low.

The reasons why the researchers decide to do the research in descriptive text is because the researchers try to apply the different technique; they are Jigsaw and Scaffolding technique. The researchers assumes that different technique can give different sense in learning process. The teacher to increase students' skills, especially in writing descriptive text, can try it. Therefore, the researchers decide to choose those techniques as the research. It is done to compare the using of Jigsaw and Scaffolding technique towards students writing descriptive text ability.

In general some the researchers identified that there were problem among the target students. Firstly, teacher used monotonous teaching technique. Secondly, teachers did not know many techniques that might be good to enhance the students' achievements in writing such as Jigsaw and Scaffolding. Thirdly, usual teaching technique made students feel bored and that was why they were stuck in learning and doing writing. Fourthly, Students felt that writing was too difficult for them to do. Fifthly, the students did not understand about descriptive text materials well. Sixth, they did not have enough knowledge or information about it and how to create the text easily. Seventh, the explanation of the materials by the teacher was not clear. Eighth, the students do not get enough drill how to create a descriptive text well. Ninth, there was not enough time to drill students to create descriptive text with the current situation. Lastly, therefore, the result of creating descriptive text of Senior High School was low.

Having analyzed the identified problems, both researchers thought that among those problems, some critical points are urgent to solve in context of this study. Thus, the priority are led to the following issues. The students' writing descriptive text

ability was still poor. In many cases, the teachers applied monotonous techniques to teach descriptive text although they did not feel that it was the cause of the students' problem. Further, the teachers had not applied yet and probably did not know many techniques such as Jigsaw and Scaffolding.

All of these issues were important to solve since it would make several parties to get benefit of the condition. Among the beneficiaries are the students. We believe that by implementing these techniques they may feel enjoyed during learning of writing process. As for students, teachers also deserve the advantages of these technique so that they may feel disburdened when they are teaching writing and in the whole process of how they students build their skill in writing. Finally it comes to any researchers who still think that previous research is the start basis to develop further investigation or research. Upon all, by doing this inquiry, many parties will get the positive things to support their theoretical foundation.

Thinking about issues disseminated above both researchers proposed the following concepts as the solutions of the explained problems above including jigsaw and scaffolding. All arguments are laid on the basis of researchers' beliefs, and assumptions, and other people experiences before.

Jigsaw is learning technique where students work in group to share different information. Student is the expert here. Students learn from other friend about some materials and combine information that have gotten by the students to make a conclusion. Each student must master the material well and give opinion or idea to the group. It means that students must be active in the group. By grouping, students

are able to express their idea and give their opinion confidently. Meeting with other students will give them new pint of view and information. It will promote them to cooperate with solving problem on their discussed issues.

In writing descriptive, Jigsaw is done through several steps enabling students to get new way to create a descriptive text. Being a member of the group, the learners are able to share the knowledge of descriptive text. It is possible for them to combine various ideas about descriptive text composition, such as in choosing the words or vocabulary, structuring, and other. Combining those ideas will create better descriptive text.

The second technique is Scaffolding. Scaffolding was adapted from concept of ZPD. ZPD is the area of exploration for the students that are cognitively prepared; require some helps and social interaction from more experienced partner to fully develop of their concepts or ideas. From the concept, Scaffolding is applied at the class to help students in developing the idea by giving intensive guidance base on the prior knowledge. Assisting, guiding, helping, and developing are some of Scaffolding aspects to build students new knowledge. It can minimize students to get stress because students are allowed to develop step by step base on their ZPD.

Writing descriptive using Scaffolding technique is done by some steps. It is applied by giving guidance until the learners are able to create their own descriptive text. The step is started by giving brainstorming to students. Brainstorming is necessary to know students' knowledge background and how far students know about descriptive text. In brainstorming, students are allowed to make the outline to help them in the next step in writing descriptive text. It is good

to be applied at the class because generally, students need help and guidance to create better writing.

In order to reach the students' better writing skill, herewith both researchers reviewed some related research and literatures. Among the previous research taken into account are explained below. The first researchers is by Yunita Sari entitled "The Comparison Using Jigsaw and TGT Technique toward Writing Descriptive Ability of Students in SMA N 1 Seputih Surabaya Academic Year 2011/2012. The result was found that the mean score of Jigsaw technique in pre-test is 57.33, in treatment is 67.38, and in post test is 76.83. Meanwhile the mean score of TGT technique in pre-test 52.33, in treatment is 62.5, and in post-test is 70.83. It means that there is significant compare between Jigsaw and TGT technique toward the students' writing ability at eleventh graders in SMA N 1 Seputih Surabaya academic year 2011/2012. Ho is rejected and Ha is accepted. That s why this research is still relevant and positive to do.

The second previous research was conducted by Destri Ayu Palupi entitled "The Comparison of Using Jigsaw and CIRC toward Descriptive Writing Ability at Senior High School State 1 Labuhan Ratu Academic Year 2011/2012". The result turned out that Jigsaw technique is more effective than CIRC technique to use as technique in instructional writing for the students if we see on the result of the data. In experiment class, for pretest the highest score is 75 and the lowest score is 50. After the researchers gives the treatment, for the posttest the highest score is 85 and the lowest score is 60. From the data, they has an increase in writing descriptive, namely from 62.5 to 70.36. In control class, for pretest, the highest score is 75 and the lowest score is

50. After the researchers gives the treatment, for pretest the highest score is 80 and the lowest score is 55. From the data, they has an increase in writing descriptive, namely from 62.36 to 66.83. This result is also in support of the proposed technique to impellent in that it resulted positive and significant effect on the students in writing ability.

The terms of writing have several meanings. Writing is a rational activity and that it is a valuable activity (Kane, Thomas S. 2000, 1). Writing is the act of making up correct sentences and transmitting them through the visual medium as mark on paper. But in modern era now many ways can do to write, not only on the paper, but also on the computer as a technology. Writing here means combining of sentence by sentence to get the meaningful result which is saved on a visual medium. Writing is produce by our mind, experiences, feeling, and many ways. It is expressed on a visual media.

When words are put together to communicate a meaning, a piece of text is created (Anderson, 1998, 2) and thus it is called writing product. Texts consist of spoken or written words that have the purpose of conveying a message. Text is created by a speaker or writer. When constructing a piece of text the speaker or writer makes choices about the words used and how these words will be put together. The choice of words will depend on the purpose and context surrounding of the text. Text is interpreted by listeners or readers. Communication occurs when the message created by a speaker is successfully interpreted by the listener or when a writer's words are understood by the reader.

A descriptive describes a particular person, place, or thing (Anderson, 1998,

26). Its purpose is to tell about the subject by describing its features without including personal opinions. A descriptive text differs from an information report because it describes a specific subject rather than a general group. Examples of descriptive texts include description of a particular building, descriptions of a particular animal, descriptions of a particular place, and descriptions of a particular person.

To construct a descriptive text, typically a descriptive text has an opening paragraph introducing the subject of the description, followed by a series of paragraphs each of which describing one feature of the subject (Anderson, 1998, 26). There can also be a final concluding section that signals the end of the description. A description text usually uses verbs in present tense. There are adjectives to describe the features of the subject and the topic sentences to begin paragraphs and organize the various aspects of the description.

The Jigsaw technique is a cooperative learning technique in which students work in small groups (Kagan, and Miguel, 2009, p.442). This technique can be used in variety of ways for the variety of goals, but it is primarily used for the acquisition of new material. It is effective to be applied in the classroom because to deliver new material for the students. Working with the group mates is interesting activity for them. In this context' however; jigsaw is implemented in a writing process.

Jigsaw is one of the classic cooperative learning techniques formulated in Cooperative Learning by Kagan (1992). . Cooperative learning is the instructional practice in which students help each other to learn in small groups towards a

common goal. The stress of the concept is “help each other”.

Scaffolding was adapted from Zone of Proximal Development (ZPD). In Raymond (2000, p.176) Vygotsky stated that Zone of Proximal Development is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers. ZPD can be defined as the “area between what children can do independently and what they can do with assistance” was stated by Raymond (2000,p. 176). ZPD designates the area of exploration for the students that are cognitively prepared; require some helps and social interaction from more experienced partner to fully develop of their concepts or ideas. So, the ZPD is absolutely relevant to the Scaffolding activity. From the meaning of ZPD above, some experts have given the term of Scaffolding.

Vygotsky defined scaffolding instruction as the “role of teachers and others in supporting the learner’s development and providing support structures to get to that next stage or level” (Raymond, 2000, p. 176). Scaffolds provide workers with both a place to work and the means to reach work areas that they could not access on their own was stated by Herber in Hartman (2002,p. 3). Instructional Scaffolding is a teaching strategy that was cleverly named for the practical resemblance it bears to the physical scaffolds used on construction sites. The strategy consists of teaching new skills by engaging students collaboratively in tasks that would be too difficult for them to complete on their own. The instructor initially provides extensive instructional support, or Scaffolding, to continually assist the students in building their

understanding of new content and process. Once the students internalize the content and/or process, they assume full responsibility for controlling the progress of a given task. In Hartman (2002, p.3) Turnbull et al (1999) states that the temporary scaffolding provided by the instructor is removed to reveal the impressive permanent structure of student understanding.

Upon all the propositions above, this research has the following matters to disclose arranged in research objectives: (1) To know whether Jigsaw technique is effective to improve students' writing descriptive text ability. (2). To know whether Scaffolding technique is effective to improve students' writing descriptive text ability. (3). To know whether there is any significant difference of students' writing descriptive text ability by using Jigsaw and Scaffolding technique.

METHODOLOGY

Research design is important to prepare for the researchers before doing the research. The researchers must plan what will be done to get the target. Research design is all processes that are needed on the planning and doing the research (Sukardi, 2003, p.183). It means that design's components include all of research structural from the beginning research is started until getting the result. But the other meaning of research design is drafting clearly of correlation between the variables, collecting data, and analysis data, so all sides have the description about the research (Sukardi, 2003, 184).

This research is quantitative experimental research. The writer uses modified pretest-posttest control group design by Sugiyono. Here, the researchers uses three

classes; they are two experimental classes and one control class.

R₁	O₁	X₁	O₂
R₂	O₃	∅	O₄
R₃	O₅	X₂	O₆

In which:

- R₁ : the first cluster randomize group, treated by Jigsaw technique
- R₂ : control cluster randomize group, treated by regular technique
- R₃ : the second cluster randomize group, treated by Scaffolding technique
- O₁ : pretest of the first cluster randomize group
- O₂ : posttest of the first cluster randomize group
- O₃ : pretest of control cluster randomize group
- O₄ : posttest of control randomize group
- O₅ : pretest of the second cluster randomize group
- O₆ : posttest of the second cluster randomize group
- X₁ : treatment of the first cluster randomize group using Jigsaw technique
- ∅ : treatment of control class using regular technique
- X₂ : treatment of the second cluster randomize group by using Scaffolding technique

A variable is defined as something that varies from one case to another (Arikunto, 2002, 98). There are two kinds of variable on the research; they are independent variable (X) and dependent variable (Y). Independent variable (X) is variable which is selected to manipulate and measure by the researchers. Dependent variable (Y) is variable which one is observed and measured to determine the effect of the independent variable.

In this research, however; the researchers uses three variables consist of two independent variables and a dependent

variable. The independent variables in this research are Jigsaw (X1) and Scaffolding Method (X2). And the dependent variable is students' writing ability (Y) which is the population narrowed with sampling as part of the variables.

Population is all the members of human, animals, events, or things that live together on the certain place and they are the target of conclusion at the end of the research (Sukardi, 2003, 53). The researchers conclude that population is all the research elements that live together and they are as the target of the research to get the conclusion and the last result of the research.

In this research, the researchers choose tenth grade in even semester of State Senior High School 1 Seputih Raman Academic Year 2012/2013. There are 7 classes they are X1, X2, X3, X4, X5, X6, and X7 in which each class consists of 30 students. So, the total population are 210 students; however' they are mapped in a cluster before taken as sampling through a method called sampling technique.

Sampling technique is way to be done by researchers to get how many samples are needed to the research. There are some kinds of sampling technique, but the researchers decide to use cluster randomize sampling technique. Cluster technique is different from the other technique because the population is sees as a group and thus the sample is based on the group, not individually.

Sample is a part of population that is observed (Arikunto, 2010, 108). Further, Sugiyono (2010, 81) says that sample is part of whole and characteristic from population itself. In this research the sampling is taken through the sampling technique mentioned above. Hence it can

be concluded that the total sample in this research are 105 students or four clusters.

Further process after taking sampling is to validate the data as the data on a research must be accurate. It is very important on the research because the research conclusion will be believed if it is accurate. Good data will be gotten if we use good measure tool. A measure tool is good if it have high validity. Validity has the meaning how far is the accuracy and meticulousness on a measure tool to measure off data. A measure tool has validity when its content measures the object that it should be measured and it is suitable with the certain criteria. After this process, it will be reliability of the data.

Reliability is measurement that shows how far the result of measuring is still consistent if the measurement is done twice or more to the same symptom with the same measure tool. Reliability can also have meaning as stability. It means that measure tool is used to measure data repeated, the result is same. A test has good reliability in which the result of the data is almost same although it is given on the different way and same respondent. The result of the test is same or the change is not significant. So, it can be said as consistency or stability. As the validity, reliability shows the degrees that are called as coefficient of reliability.

There are two kinds of reliability. They are external reliability and internal reliability. External reliability can be done by some ways; they are test-retest (stability), equivalent, and the combination of test-retest and equivalent way. Different from external reliability, internal reliability can be tested by analyzing the consistency of each item in the instrument using certain technique. Some techniques can be used to count internal reliability are Alpha formula,

H.J.X Fernandes formula, Spearman Brown, Flanagan formula, K-R.20 formula, K-R.21 formula, Rulon formula, Hoyt formula, etc.

There are some ways to count the reliability, but here the researchers use **Alpha** formula because the test item is writing descriptive test. In writing test, the score is not absolute 0 and 1 like multiple choice items but range between. Here is the **Alpha** formula that is used by the researchers. In the following data collecting will be discussed.

In a research, collecting data is very important because it determines the result from its research. It is pretest and posttest to get the data of students' descriptive writing text. The test is done at SMA Negeri 1 Seputih Raman. The method of collecting data is written with the test item instrument. The process of passes through several pauses and the first one is pretest.

Pretest is the test that is given to the student before giving treatment. It is in order to find out the students' score in writing descriptive text. The researchers uses written test to get students' writing descriptive score. The students are asked to create descriptive text base on the topic that is served using some pictures. After this process and treatment, then posttest is taken.

The posttest is conducted after applying treatment. It is to know how far students comprehend of writing descriptive text and to know the influence of using Jigsaw and Scaffolding technique in learning process. The researchers use the same kind of test as pretest, written test to get students writing descriptive text after giving the treatment. Upon all of these steps the next is data analysis technique.

Data analysis technique in this research consists of calculating normality test,

homogeneity test, and hypothesis test. Normality test is calculated to know whether the data is normal or not. Homogeneity test is counted to determine whether the data is homogenous or not, and hypothesis test is calculated to answer the hypothesis off the research. Further steps is normality test.

One of the best assumptions of the statistic computation is that the data must fulfill the qualification of normal distribution. Therefore analyzing the normality of distribution of the students' scores is very important. To analyze the normality of distribution of the scores, the researchers uses statistic formula. After normality test is shifted to homogeneity test.

The objective of homogeneity test is to know whether the sample is taken from homogeny variance population or not. The formula of hypothesis is as follows:

H_0 : variance of population is homogeny

H_1 : variance of population is not homogeny.

While the criteria of taking decision are:

- If probability (Sig.) more than ($>$) 0,05 H_0 is accepted;
- If probability (Sig.) less than ($<$) 0,05 H_0 is rejected.

For homogeneity test is used Bartleth test (Arikunto, 2010, 364).

Since the researchers implemented experimental research, hypothesis is set to make the goal clear. Hypothesis test is analyzing the data that has been gotten by the researchers. It should be done to prove the hypothesis that has been formulated. A hypotesis will be accepted or rejected bases on the result of analyzing the data. The formula of the test is One-Way ANOVA.

RESULT AND FINDING

After a long time of process of conducting this research, the result and finding are harvested. The tryout was done on January 28rd, 2013 at the first grade of State Senior High School 1 Seputih Raman. The tryout helped to get the validity and reliability test. If the test has been valid and reliable, the test can be used in the research. The research was done in last January, after researchers gained the data from tryout, the researcher did the research to give the treatment, Jigsaw technique for the first experimental class, Scaffolding technique for the second experimental class, and regular technique for control class.

The first target to gain was the Result of validity instrument. In this research, the researchers used pretest and posttest as instrument. Before doing the test, the instrument should have been known about its validity level. The measurement of the writing test, the researcher used content validity through tryout test. The researchers gave tryout once for 20 students. After calculation, the test has been reliable; it means that the instrument has been valid. So, the researcher used the tryout test to be tested. The researcher used the same question for pretest and posttest. It seems that both pretest and posttest need reliability.

The Result of reliability of the test is needed in order that the test could be used. The researchers used Alpha Formula to know the reliability of the instrument. The test consists of 9 aspects to examined 20 students. The first step was searching total variance of the data. After getting the total variance, the researchers used Alpha Formula to count the reliability of the instrument. After calculating data by using Alpha Formula, it was gotten 0,92 in the tryout. So, the test was reliable and could

be used for the research. Further is the result of pretest.

Researchers gave the pretest before giving the treatments. The researchers administered the pretest on January 30th, 2013 for experimental classes and control class on the same day at different times. The pretest was given to 90 students which consisted of 30 students in X.2, 30 students in X.7, and 30 students in X.4. In the first experimental class the highest score was 75 and the lowest was 43 which had a mean 59. The highest score in second experimental class was 70 and the lowest score was 43 with the mean was 56.5. Meanwhile, in control class the highest score was 70 and the lowest was 40 which had a mean 55. From the data, it was known that most of them had not mastered writing well. In the next steps after pre-test was treatment.

In this research, the researchers gave four treatments, and each treatment consists of one topic. In the first experimental class, for the first treatment, the highest score was 74 and the lowest score was 45. In the second treatment, the highest score was 78 and the lowest score was 49. In the third treatment, the highest score was 81 and the lowest score was 50 and in the fourth treatment, the highest score was 83 and the lowest score was 55. The total score from the first treatment until the fourth treatment in experimental class was 79.08.

In the second experimental class, at the first treatment, the highest score was 79 and the lowest score was 45. In the second treatment, the highest score was 80 and the lowest score was 48. In the third treatment, the highest score was 81 and the lowest score was 48 and in the fourth treatment, the highest score was 82 and the lowest score was 51. The total score from the first treatment until the fourth treatment in experimental class was 76.68.

In the other hand, in control class the total score from the first treatment until the fourth treatment was 68.90. For the first treatment, the highest score was 69 and the lowest score was 41. In the second treatment, the highest score was 70 and the lowest score was 40. In the third treatment, the highest score was 71 and the lowest score was 42 and in the fourth treatment, the highest score was 70 and the lowest score was 43. After treatment the posttest was applied.

Result of the posttest was given after the researchers gave the treatment in four meetings. The post-test was given in both of classes in order to know the students' writing ability after they received the treatments. The pre-test and post-test had similar type. The purpose of the test was to know the significant different result between experimental and control class. The researchers administered the posttest for experimental class and control class on the same day at different times.

The result of posttest in control class, experimental class of Jigsaw, and experimental class of Scaffolding are various. For the control class, the highest score is 73 and the lowest score is 42. In experimental class of Jigsaw, the highest score is 88 with the lowest score is 58. For the experimental class of Scaffolding, the highest score is gotten 86 and the lowest score is gotten 58. In order to make the posttest acceptable, the normality test was tested.

The normality test was conducted to know whether the data both of classes were normal distributed or not. Jazim (2011, p.8) stated that the data is normal if $\chi^2_{hit} \leq \chi^2_{df}$. The formula that is used is

$$\chi^2_{hit} = \sum_{i=1}^k \frac{(O_i - E_i)^2}{E_i}$$

The data distribution of pretest result in control class is normal. After calculation of the data, it is gotten that χ^2_{hit} is 1.1609. Based on the G table, the result of χ^2_{df} 1% is 11.3 and χ^2_{df} 5% is 7.81. From the calculation, it seems that $\chi^2_{hit} = 1.1609 < \chi^2_{df}$ 1% = 11.3 and χ^2_{df} 5% = 7.81. For thus, the data distribution is normal.

In experimental class of Jigsaw, the data distribution of pretest result is normal. After counting of the data, it is gotten that χ^2_{hit} is 2.1463. Based on the G table, the result of χ^2_{df} 1% is 11.3 and χ^2_{df} 5% is 7.81. From the calculation, it seems that $\chi^2_{hit} = 2.1463 < \chi^2_{df}$ 1% = 11.3 and χ^2_{df} 5% = 7.81. It means that the data distribution is normal.

For experimental class of Scaffolding, distribution of the data in pretest result is normal. After counting of the data, it is gotten that χ^2_{hit} is 2.5248. Based on the G table, the result of χ^2_{df} 1% is 11.3 and χ^2_{df} 5% is 7.81. From the calculation, it seems that $\chi^2_{hit} = 2.5248 < \chi^2_{df}$ 1% = 11.3 and χ^2_{df} 5% = 7.81. It means that the data distribution is normal. Further process is calculation of both normality in experimental class.

The calculation of the data; the result of normality of pretest in both experimental class of Jigsaw, experimental class of Scaffolding, and control class is normal. In the experimental class of Jigsaw, it is gotten 4.8365, in the experimental class of Scaffolding, the researchers is gotten 2.0237, and in control class, the result is gotten 4.9462. It showed that for $\alpha = 5\%$ and $\alpha = 1\%$ $\chi^2_{hit} \leq \chi^2_{df}$. So, the sample distribution is normal. The last two step then was homogeneity test.

The result of homogeneity test is gotten by using Bartleth test, in which the criteria are H_0 is rejected if $\chi^2_{hitung} > \chi^2_{tabel}$ and H_0

is accepted if $\chi^2_{hitung} < \chi^2_{tabel}$. The values of pretest score in experimental class of Jigsaw, experimental class of Scaffolding, and control class are homogenous. From the calculation of Bartleth test, it is gotten that $\chi^2 = 0.01$. In which $X_{0.95(29)}$ is 42.6 and $0.01 < 42.6$. It means that H_0 is accepted or the data is homogenous. The calculation of data in posttest for experimental class of Jigsaw, experimental class of Scaffolding, and control class shows that the values of these data are homogenous. From the calculation of Bartleth test, it is gotten that $\chi^2 = 0.01$. In which $X_{0.95(29)}$ is 42.6 and $0.01 < 42.6$. It means that H_0 is accepted or the data is homogenous. Hence the last step was hypothesis test.

The calculation of the data by using One Way ANOVA, the researchers gets the value of $F_0 = 69.3$. $db_F = 2$ against to 87, it seems on the F table and it is gotten the result of $F_t 1\% = 7.31$ and $F_t 5\% = 4.08$ and it seems that $F_0 > F_t 1\%$ and $F_t 5\%$ in which $F_0 = 69.3 > F_t 1\% = 7.31$ and $F_t 5\% = 4.08$. From the table of criteria of hypothesis, it means that H_0 is refused and H_a is accepted.

After counting of the hypothesis, then the counting is continued to t test or mean difference. From the calculation of t_0 between M_1 and M_3 , it is between Jigsaw technique and usual or common technique that is used in the class, the result is 17.8. By using t two tails, it is founded that $d_b = 89$, $t 1\% = 2.70$, and $t 5\% = 2.02$ or $t_0 = 17.8 > t_t 1\% = 2.70$ and $t_t 5\% = 2.02$, it means that the data is very significant and there is very significant mean difference.

The calculation is continued to the difference mean between M_2 and M_3 or between Scaffolding technique and common or usual technique in the class. From the calculation, it is gotten $t_0 = 5.48$. By using t two tails, it is founded

the result of $d_b = 89$, $t 1\% = 2.70$, and $t 5\% = 2.02$ or $t_0 = 5.48 > t_t 1\% = 2.70$ and $t_t 5\% = 2.02$, it means that the data is very significant and there is very significant mean difference.

The next calculation is the difference mean between M_1 and M_2 or between Jigsaw technique and Scaffolding technique. From the calculation, it is gotten $t_0 = 12.3$. By using t two tails, it is founded the result of $d_b = 89$, $t 1\% = 2.70$, and $t 5\% = 2.02$ or $t_0 = 5.48 > t_t 1\% = 2.70$ and $t_t 5\% = 2.02$, it means that the data is very significant and there is very significant mean difference.

From the calculation above, it seems that Ha_1 , Ha_2 , and Ha_3 are accepted or H_0 is refused because the result of the $F_0 > F_t 1\%$ and $F_t 5\%$. Using of Jigsaw and Scaffolding technique is effective to improve students' writing descriptive text ability and there is significant difference by using Jigsaw and Scaffolding technique base on the calculation above.

DISCUSSION

Referring back to the explanation in the previous chapter, Kagan and Miguel (2009) and Evelyn (1999) stated that The Jigsaw technique is a cooperative learning technique in which students work in small groups. Working with the group mates is interesting activity for the students. Jigsaw, as one of cooperative learning, trains students to be active in group working, and learn together with other friends to get the goal of the materials. To solve the problem, students should share their new idea. It can improve students' thinking and giving the contribution about the materials.

Further, the results generally suggest that Jigsaw as cooperative learning develops higher-order thinking skills, enhances

motivation, improves interpersonal relations and peer relations. Thinking skill is very important to develop students' learning achievement. Interpersonal relation will help them to manage and control themselves. Peer relations will help them to cooperate and how to be a part of a group. And motivation is needed to increase students' willing in learning process. It means that Jigsaw is effective to be applied in the classroom to increase students' writing skill. There are some advantages of Jigsaw technique based on Kagan statement. This is the effective way to learn the material. Jigsaw builds a depth of knowledge, discloses a student's own understanding and resolves misunderstanding, builds on conceptual understanding, and develops teamwork and cooperative working skills. The other advantage is Jigsaw is joyful and interesting technique to be applied in the classroom. The students and teacher will not be bored in the class. They will learn in different situation and class' atmosphere.

In the research, applying Jigsaw technique to improve students' writing descriptive text ability is effective. Students, who get Jigsaw technique in the class, be more active and there is progress in their learning achievement. It seems from their score of posttest. In pretest, their score is lower in writing descriptive text ability. But, after treated by Jigsaw technique, there is increasing score of their writing descriptive text ability. It means that the result is consistent with the expert's theory.

Scaffolding, as Hartman(2002) stated in the previous chapter, is a technique that is adopted from Zone of Proximal Development (ZPD). It is the distance between the actual developmental level as determined by independent problem solving and the level of potential

development as determined through problem solving under adult guidance, or in collaboration with more capable peers. It can be said that Scaffolding is guidance technique in learning until the students can do their own concept to get the goal of learning. ZPD designates the area of exploration for the students that are cognitively prepared; require some helps and social interaction from more experienced partner to fully develop of their concepts or ideas. So, the ZPD is absolutely relevant to the Scaffolding activity.

The advantages of Scaffolding technique are engaging the learners in active process learning, Scaffolding minimizes learners' level of frustration, builds on prior knowledge and forms new knowledge, Scaffolding instruction motivates the students to learn, Scaffolding helps students to be active and get new knowledge based on their cognitive level. Those advantages give the reason to apply Scaffolding in the classroom.

Scaffolding in the class, as the researchers did, can help students in doing their assignment. The researchers gave intensive guidance for the students and explanation until they can do their assignment by themselves. Giving brainstorming in Scaffolding can improve students' thinking. Besides, assisting students in their learning activities can improve their writing descriptive ability. It can be seen in their score of pretest and posttest. Their posttest score is higher than their pretest score. The students can understand their material well. When the researchers was giving the question about the material, the students can answer it well. Further, they can write descriptive text independently. Based on the description above, Scaffolding technique is consistent with the theory from the expert.

Calculation results provide evidence that the posttest students in experimental class, especially by using Jigsaw technique, are better than control class. This can be seen when the posttest score of students compared with pretest score. The result showed that there was significant differences between pretest and posttest score (posttest > pretest). The results are consistent with the result of research by Yunita Sari, in which the using of Jigsaw technique is more effective to improve students' writing descriptive text ability. The result of the study shows that the students' achievement in narrative paragraph by using of Jigsaw technique is higher than the using of other technique. By using Jigsaw technique, students feel enjoy in learning narrative text with their group, so their achievement in narrative text can be improved. This research result is consistent with the previous research from Destri Ayu Palupi in which Jigsaw technique is more effective than other technique to improve students' writing descriptive ability. It shows in the result in which students' score in writing descriptive text by using Jigsaw technique is higher than the score of writing descriptive text ability by using CIRC.

Although the researchers used different technique which is Scaffolding technique, but the result shows that Jigsaw technique is more effective to improve students' writing descriptive text ability in State Senior High School 1 of Seputih Raman. But, the calculation shows that there is any significant difference by using Scaffolding technique if it is compared with the usual technique or common technique that is used usually.

CONCLUSIONS AND SUGGESTIONS

Having analyzed the data and proceed or calculated them in a logical arguments as result of the research in the grade X of State Senior High School 1 of Seputih Raman academic year 2012/2013, both researchers draw conclusion:

Firstly, Jigsaw technique is effective to improve students' writing descriptive text ability at the grade X students of State Senior High School 1 of Seputih Raman academic year 2012/2013 with significant difference in the result of Jigsaw technique to improve students' writing descriptive text ability. The result is proven by the difference score of pretest and posttest using Jigsaw technique in the class.

Secondly, Scaffolding technique is effective to improve students' writing descriptive text ability at the grade X students of State Senior High School 1 of Seputih Raman academic year 2012/2013 with significant difference in the result of Scaffolding technique to improve students' writing descriptive text ability. This is proven by the fact the gained score of pretest and posttest of students' writing descriptive text ability by using Scaffolding technique.

Thirdly, there is any significant difference of students' writing descriptive ability by using Jigsaw and Scaffolding technique in improving students' writing descriptive text ability at the grade X students of State Senior High School 1 of Seputih Raman academic year 2012/2013. It seems from the difference score of pretest and posttest by using Jigsaw and Scaffolding technique. In fact, the students who were taught by using Jigsaw technique got higher score than the students who were taught by using Scaffolding technique. It means that Jigsaw technique is more

effective to improve students' writing descriptive text ability at the grade X students of State Senior High School 1 of Seputih Raman academic year 2012/201.

Last but not least, it can be declared that Jigsaw and Scaffolding technique is effective to improve students' writing descriptive text ability of the grade X of State Senior High School 1 of Seputih Raman. This current research is still inline with the previous ones done by Yunitasari (2012) resulted . It means that there is significant compare between Jigsaw and TGT technique toward the students' writing ability at eleventh graders in SMA N 1 Seputih Surabaya academic year 2011/2012. Ho is rejected and Ha is accepted. Also it is still in support of the research done by Palupi (2012) resulting a significant result of the applied techniques.

SUGGESTIONS OR IMPLICATIONS

Upon the consideration of the analysis, some suggestions or implications are addressed as follow:

Teachers are given choices to make their students get better ability and one of them by improving students writing descriptive text ability, using of Jigsaw technique. Based on this result, Jigsaw can improve students writing descriptive text ability. It seems from the result of pretest and posttest in which there is progress of students' ability in writing descriptive text by suing Jigsaw technique. This implies that this technique is applicable and usable in any situation

Scaffolding, as the technique that is adopted from Vygotsky's concept of ZPD, can be used in teaching writing descriptive text in the class. Still, in this result, using Scaffolding is effective to increase students' writing descriptive text ability.

The result of the data shows that there is any significant progress of students' score after the treatment. This also implies that Scaffolding can be the alternative technique for the teacher in teaching writing descriptive text.

To train the students in group work, Jigsaw and Scaffolding are effective to be applied in the class, especially in learning of descriptive text. Teamwork is good way for the students in learning. By teamwork in Jigsaw and Scaffolding technique, students can share their knowledge, update their knowledge, and improve their confidence as all students are encouraged to take part to get the aim of the study. Learning by using Jigsaw and Scaffolding are interesting. The class is not monotonous and the students can learn in joyful and different learning situation. It means that there positive hope if teacher can apply this technique in the classroom.

All in all, the implication of this study is that there is not any good technique for general situation but there is a appropriate technique for appropriate situation.

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