

CHAPTER III

RESEARCH METHODOLOGY

This chapter contains methodology of the research to guide the writer in conducting the research. It consists of research design, research method, instrument of the research, population and sample, data collection, data analysis, and research procedures.

A. Research Design

Research design is commonly defined as the way of thinking and doing preparation to complete research and achieve the goal of the research. Burns and Grove (2003:195) define a research design as “a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings”. Parahoo (1997:142) describes a research design as “a plan that describes how, when and where data are to be collected and analyzed”. Tavakoli (2012:546) in Kaswan and Suprijadi (2006:10) stated that, research design is the architectural plan a research project decision regarding what, where, when, how much, by what concerning an inquiry or of conditions for collection and analysis of the data in a manner that aims to combine relevance to the research purposes. In addition, Polit et al (2001:167) define a research design as “the research design as “the teachers overall for answering the research question or testing the research hypothesis”.

From the definition above, research design is step or a plan for a study in order to get results appropriate with the research and the result. In this research the researcher used “Quantitative Research Design”.

Moreover, they explain that quantitative research design is a deductive theory based research process that focuses primarily on testing theories and specific research hypotheses that consider finding differences and relationship using data statistical methods to make specific conclusion about the phenomena (Kaswan & Suprijadi, 2016:11). According to Gunderson (2002:81), quantitative research is explaining phenomena by collecting numerical data that are analyzed using mathematically based methods (in particular statistic).

Based from the experts, research design is the theory or phenomena for collecting the data and we are analyzed using mathematically steps to finding specific conclusion for our research.

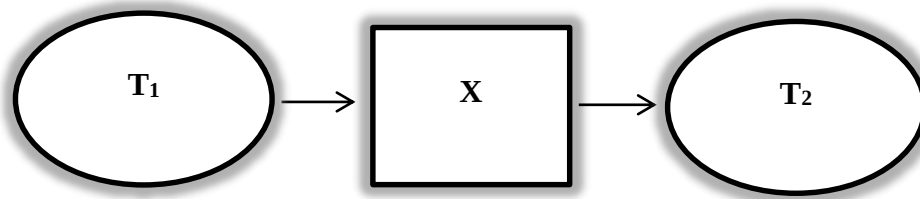
B. Research Method

Many researchers must be applying the research method for their research or scientific domain. According to Sugiyono (2004:1), research method is a scientific way to obtain the data for the purpose and usefulness. The researcher decided to use the method of pre-experimental in one group pretest-posttest design. There are three steps to use this method:

First, step is the administration of pretest measuring the dependent variable. Second, step is the application of the experimental treatment (independent variable) to the subject and. Third, is the administration of a posttest measuring the dependent variable again.

Differences due to application of the experimental treatments are then determined by comparing pretest and posttest scores (Borg and Gall:1979 in Kaswan and Suprijadi, 2016:28).

There was a class that given the test. The pretest was given find out of the student of multiple choices vocabulary form test based on the materials of their exercise book before the researcher given the step of treatments. The posttest for the students in one group class was given like a pretest with any instrument with practice storytelling by one topic or more. The pretest and posttest design may be illustrated as follow:



Remark:

T₁ : Pretest

X : Treatment

T₂ : Posttest

C. Instrument

The instrument is important in research or scientific for researcher and it can be indicators for our research. According to Tavakoli (2012:277) the instrument is any advice which is used to collect data. The instrument of the research can be much test, questioner, interview, observation, etc. in this research the researcher uses instrument in form of multiple choices were contains of thirty questions and the test consist of two parts, pretest and posttest session.

In the pretest, the students must answer 30 questions multiple choices test based on the material of their book in papers. In doing the pretest the students are not prepares by storytelling as an aid. Then, in the posttest the students giving the test same of pretest step and they are provide by storytelling. Before they do the posttest, the researcher gives them five treatment steps:

The First treatment meeting was held on Friday, January 11st 2019 at 06.45 to 08.05 am (in 2 meeting hours lesson) in the class of IX – G and On that day before given treatment step the researcher was applied the apperception for the students in the class room, after that the researcher told to them about the material on their book and the researcher was allocated for that about 10 minutes. And then the researcher given the first treatment consists introducing storytelling technique and the benefits use this technique for developing their reading skill by covert in narrative texts, because the researcher must be following the material on the their guide book combined with researchers technique. For the first material storytelling the researcher given story narrative text about Sangkuriang and the researcher was giving practice the example how to work storytelling in front of the class with intonation, articulation and gesture. While the researcher do the treatment the students was took a copy paper narrative teks and exercise 10 questions of multiple choices about Sangkuriang and the researcher given 45 minutes for first the treatment meeting.

The Second treatment meeting was held on Friday, January 18th 2019 at 06.45 to 08.05 am (in 2 meeting hours lesson) in the class of IX – G and On that day the researcher was given apperception usually same with the first meeting and reviewed about the material in their book about 10 minutes after do that the researcher gave material of storytelling with practice in front of the class and for the subject of narrative text the researcher taken the title of The Legend of Mount

“Tangkuban Perahu” with exercise 10 questions multiple choices in a paper copy for the students in the classroom. And the researcher was given 45 minutes for the second treatment meetings.

The Third treatment meeting was held on Friday, January 25th 2019 at 06.45 to 08.05 am (in 2 meeting hours lesson) in the class of IX – G and the researcher given apperception usually in every meeting in class room with them for activities before treatment step, the researcher giving review and material in their book about 10 minutes and the researcher already to given storytelling technique with narrative text with the title of The Story of Telaga Warna with the practice by the researcher until end of the story as well. After that the researcher was shared a sheet content 10 exercises questions of multiple choice and the students must be answered all of the questions about 45 minutes for the third treatment meetings.

The Fourth treatment meeting was held on Friday, February 1st 2019 start at 06.45 to 08.05 am (in 2 meeting hours lesson) in the class of IX – G as well as usually in every meeting in classroom the researcher was given apperception step before given the treatment do and continued the next steps are giving the review and material based on the their guide books in the school and then the researcher given storytelling technique with narrative text with the title of The Legend of Malin Kundang with practice in front of the class to them in the classroom until end session and the researcher always giving the test exercise 10 questions of

multiple choice for knowing their ability after given the storytelling technique by the researcher. And for this treatment meeting the researcher was spend 45 minutes until end but while the researcher gave the practice and test the students looking enjoyable.

The Fifth treatment meetings was held on Friday, February 8th 2019 start at 06.45 to 08.05 am (in 2 meeting hours lesson) in the class of IX – G for this moment is the last treatment meetings and the researcher usually giving the apperception for the students in the classroom, after that the researcher given the review and material based on their guide books about 10 minutes. The researcher taken the subject narrative text for the last meeting with the title subject is The Story of Toba Lake and usually the researcher was practiced storytelling technique in front of the class be carefully and easier to the students, until end the researcher share a sheet for test consist 10 exercise of multiple choices in a copy paper and the students are important to belong the test about 45 minutes in the last meeting of treatment. Furthermore, the researcher was told to the students for activities treatment by the researches is done or completed to do and sometimes the researches has looked feeling sad from the students. Well, before the closed the program instruments, the researcher informed to them about posttest session in next week.

According to the steps of instrument, the instrument itself have schedule every Friday in a week period of January to February 2019 and the instrument have start at 06.45 to 08.05 am (in 2 meeting hours lesson) in the class of IX – G.

D. Population and Sample

1. Population

Population is a set or collection of all elements processing one or more attribute of interested. According to Conaway & Powell (2010:116) population is the total of all case that conform to a perspective criteria or set of criteria and Sugiono (2010:117) stated. Population is geographic generalization there are: object or subject has quality and certain of characteristic that set by researcher to learning then make the conclusion. Based on the definition, the researcher used the seventh grade students of SMP NEGERI 10 CIMAHI. The population of the research which the school has 60 students in ninth grade.

2. Sample

Selection of the sample is very important step in conducting a research. Sample is a part of population which is analyzed and sample must be representative as one is to be able to generalize with confidence from the sample to population. Based on Ary (2002:163) a sample is a group of a population. It means that good sample must be representative of the entire as possible, so that the generalization of the sample of this research. Creswell (2012:142) stated that sample is a subgroup of the target

population that the researcher plans to study for generalizing about the target population. Therefore, the sample in this research the writer used IX-D class which has 30 students.

E. Hypothesis

Ho = There is no influence after applying and using “Storytelling” to the students reading comprehension at SMP Negeri 10 Cimahi.

Ha = There is influence after applying and using “Storytelling” to the students reading comprehension at SMP Negeri 10 Cimahi.

Where the criterions were:

(Ho) accepted if *Sig.* (P - value) > 0,05. Means normal distribution.

(Ha) accepted if *Sig.* (P - value) < 0,05. It's mean abnormal distribution.

F. Data Collection Technique

Techniques of collecting data in this research are using quantitative data. The quantitative data in this research used pretest and posttest. Here is the explanation:

1. Administering Pretest

Pretest was held on Friday, January 4th 2019. On that day, English class was on the 3rd and 4th hour (45 minutes per-hour of lesson). The students had 45 minutes to finish

the test (multiple choices test) and they were not allowed to open the gadget, book or dictionary during the test.

2. Conducting Treatment

The treatment conduction was held on Friday, January 11st to 18th 2019. The researcher spent 45 minutes per meeting to give the students treatment steps. The treatment itself was about reintroducing what a storytelling technique. And the researcher told them that in storytelling have technique to make process in learn to be easy and this technique can improve or develop reading comprehension of them and this way might be needed to help them learn about their creative thinking or build potentials themselves. The researcher giving practice in front of the class to starter storytelling practice based on the topic of their book.

3. Administering Posttest

The posttest was held as on Friday, January 25th 2019 in the last hour of lesson the test was started on 8:30 am and ended on 9:30 am in English class was on the 1st and 2^{sc} hour (45 minutes per-hour of lesson). The students had 45 minutes to finish the test (multiple choices test) and they were not allowed to open the gadget, book or dictionary during the test.

G. Technique of Data Analysis

1. Technique of Data

After the writer gets the data from the result of the pretest the writer to do the reliability test and the validity test, as follows:

a. The Reliability Test

The writer uses Anates v.4 application to test the reliability and validity of the test. The result of reliability test show the average is 48.23, standard intersection 14.98, correlation XY 0.42 and test reliability 0.59.

According to Ruseffendi (2005:160) interpretation of the reliability coefficient is as follows: 0.00 – 0.20 is very low, 0.20 – 0.40 low, 0.40 – 0.70 medium, 0.70 – 0.90 high, 0.90 – 1.00 very high. The result of reliability test by using Anates v.4 application is 0.59. And the researcher can concluded the result of the reliability testing of the research instruments in the form of tests given to students is medium or quite reliability.

b. The Validity Test

After testing the reliability of the test and then for next steps the writer to do the validity of the test. According to interpretation of the correlation coefficient (r_{xy}) is as follows: 0.80 – 1.00 is very high, 0.60 – 0.80 is high, 0.40 – 0.60 is medium, 0.20 – 0.40 is low, 0.00 – 0.20 is very low. The result of testing the validity of using

Anates v.4 is xy 0.42. the researcher can conclude the result of the validity of the research instrument given to the students is medium or quite valid.

2. Data Analysis

After the data were collected, the researcher analyzed the data used SPSS v.23. that is mean, standard deviation, normal distribution and T – test.

1. Mean

According to Fraenkael and Wallen (1990:51). Mean, is another average of all the scores in a distribution. It is determined by adding up all the scores and dividing this sum by the total number of scores.

2. Standard Deviation

Standard deviation is the most useful index of variability according to (Fraenkel and Wallen, 1990:51).

3. Normal Distribution

Normal distribution is normal curve or distribution a bell shaped curve or distribution is a theoretical distribution which shows the frequency or probability of all the possible values that continuous variable can take according to (Kaswan and Suprijadi, 2013:197). The steps of normality distribution or normality test as follow:

- a. First, click Analyze menu and then choose Descriptive statistics.
 - b. Second, move to the pretest and posttest to dependent list, next click plots.
 - c. Third, checklist Normality test and then click continue.
4. The T – test

The T – test or student test is a parametric test which is used to discover whether there are statistically significant differences between the mean of groups. The tests are used to measure the students achievement on the lesson being through such as: pretest and posttest. The steps of T – test:

- a. First, click Analyze menu
- b. Second, choose and click Compare means
- c. Third, choose and click Paired sample T – test.

H. Research Procedure

In this research seven meetings were held. In the first meeting the students are given the pretest questions before giving the treatment and explanation in the next meeting. In the second until sixth meetings, the students were given the treatments or explanation about storytelling technique, and implementation to improve students reading skill to help them understand easily about answer multiple choices in narrative text.

In the eighth meeting, the students were given the posttest questions which questions are the same with the pretest questions, this was to find out that after writer gave them treatments or explanation about the improvement of students in reading comprehension using storytelling, students score or achievement is significantly better or not.