

CHAPTER III

RESEARCH METHODOLOGY

A. The Method of the Research

Singh said that “Research is a process to study the basic problems, which contribute in the edifice of human knowledge.”¹ It means that research is a process studying the problems as a systematized effort to gain the knowledge. There are two kinds of research, they are quantitative and qualitative research. The kinds of quantitative design are experimental, survey, and correlation.

This research is an experimental research that consisted of two variables, they are: variable (X) is GIST strategy, while variable (Y) is students’ reading comprehension. According to Nunan, “Experiment is a procedure for testing a hypothesis by setting up a situation in which the strength of the relationship between variable can be tested.”² John W. Best in Kumar Singh said that “Experimental research is the description and analysis of what will be or what will occur, under carefully controlled conditions.”³ It can be concluded that experimental research is the way of testing a hypothesis to find out the causal relationship between variables under controlled.

¹Yogest Kumar Singh, *Fundamental of Research Methodology and Statistic* (New Delhi: New Age International Publisher, 2006), 261

²David Nunan, *Research Method in Language Learning* (New York: Cambridge University Press, 1992), 230.

³Singh, *Fundamental of Research Methodology and Statistic*, 134.

The design of this research is a pre-experimental research with one group pre-test and post-test design. According to Porte “Pre-experimental design is simple and inexpensive to implement and exploratory in nature, but lacks control groups to compare with the experimental group.”⁴ Nunan stated that “There is only one class as the experimental group, because pre-experiment may have pre and post-test, but lacks a control group.”⁵

The researcher will apply the GIST strategy in teaching reading to all of student in the experimental class. The researcher chooses the pre-experimental method because the aim of the method is to find the effectiveness of a method. The researcher wants to know the students’ reading comprehension before and after treatment through the pre-test and post-test, this research used the instrument in the form of reading comprehension tests. After that, the students’ scores of this reading test will use to analyze the students’ reading comprehension skill. And the researcher will judge whether the GIST Strategy is effective or not in teaching reading comprehension.

B. Time and Place of the Research

This research took place in MA Islamiyah Ciomas which is located on Jl. Raya Palka, Kp. Babakan Sukawangi Ds. Sukadana, Kec. Ciomas, Kab. Serang - Banten. The research was held over a period of time from 30 August 2016 until 24 September 2016.

⁴Grane Keith Porte, *Appraising Research in Second Language Learning* (Philadelphia: John Benjamins Publishing Company, 2002), 64.

⁵Nunan, *Research Methods in Language Learning*, 41.

C. The Population and Sample

According to Singh, “Population is the entire mass of observations, which is the parent groups from which a sample is to be formed.”⁶ The population of this research is the second grade students of MA Islamiyah Ciomas in 2016/2017 academic years. It has 2 classes, the number of the second grade students of MA Islamiyah are 42. That is divided into two classes, they are: XI. IIS A and XI. IIS B, which is the number of class XI IIS A are 22 students and class XI IIS B has 20 students.

Singh said that “A sample is a small proportion of a population selected for analysis.”⁷ Based on the pre-experimental method, this research uses only one class from the second grade of MA Islamiyah Ciomas. The researcher takes XI. IIS B as an experimental class. It means that XI. IIS B will be taught by using GIST Strategy.

D. The Research Instrument

Research instrument is for facilitating that use by the researcher to collect the data. In this research, the test is used as an instrument to collect the data. The students will be tested by reading tests. The aim of the test as an instrument used by the researcher is to know the students’ reading comprehension skill. The test is given in this research is 10 multiple choice task and 5 essay. To get the data of students’ reading comprehension, the researcher will give a

⁶Singh, *Fundamental of Research Methodology and Statistic*, 82.

⁷Singh, *Fundamental of Research Methodology and Statistic*, 225.

pre-test before treatment and post-test after treatment using GIST Strategy for experimental class.

E. The Technique of Data Collecting

In collecting the data, the research instruments used by the researcher are:

1. Observation

Before doing this research, the writer observed the location where the research was carried out. The purpose of this step is asking the permission of the headmaster for doing this research at her place, and to know whether the population and sample are valid or not. Then, the writer continued to observe teaching learning process during her research. In this case the writer uses participatory observation where C.R. Kothari state that “ if the observes by making himself more or less, a member of the group he is observing so that he can experience what the members of the group experience, the observation is called as the participant observation”.⁸

2. Test

The test is a tool to measure students’ skill in education. Test is very important because the outcome of the test determines the success and failure of students in the narrow meaning. Test provides much information that is useful to be evaluation of teaching and learning process. The writer gave one class experiment reading pre-test before applying GIST Strategy and

⁸ C.R. Kothari, *Research Methodology Methods And Technique*, (New Delhi, New Age International Publisher, 2004), 96.

post-test after applying GIST Strategy. The questions of pre-test and post-test based on the criteria of reading comprehension consist this points :

- a. Main idea, supporting, and detailed information in written discourse {number 6 (multiple choices), 12 and 13 (essay)}
- b. Vocabularies Use {Number 2, 8 (multiple choices) and 11 (essay)}
- c. Draw conclusions and inferences from written discourse {Number 3, 7 (multiple choices) and 15 (essay)}
- d. Explicit Question {Number 1, 4 and 10 (multiple choices)}
- e. Knowing the style and the author's intention to convey ideas in written discourse {Number 5, 9 (multiple choices) and 14 (essay)}.

In this step, the writer gave pre-test and post-test items like this following:

a) Pre-test

The researcher will conduct the pre-test when the first time enters the class. Once only to experiment class. It is aimed to know the students' ability in material which given by the researcher. The test for multiple choice consists two texts with the title "Student Volunteers Needed" and "Learning English". The type of test that used by the researcher is 10 multiple choices and 5 essay. It is aimed to know the students' ability in material which given by the researcher.

b) Post-test

Post-test also will conduct once for experimental. The post test will give after treatment. It is aimed to know how the improvement in students' ability after treatment. It is aimed to know the students' ability in material which given by the researcher. The test for post-test consists two texts with the title "Indonesian Forest" and "Announcement". The type of test that used by the researcher is 10 multiple choices and 5 essay.

In addition, the scoring system of pre-test and post-test in reading comprehension ability are this follows:

i. Multiple choices task

For the reading comprehension test in pre-test and post-test, the correct answer is given score 10 (ten) and the incorrect answer is given 0 (zero). So, the total score is 100 from 10 (ten) questions in multiple choices.

ii. Essay task

Score	Level of score	Indikator	Level of quality	Number of question
Main idea	1 – 5	Can identify Sentence but does not tell the main idea, but does have some detail from the passage.	Lack	12
	6 – 10	Can identify Sentence tells the	Good enough	

	15-20	main idea, but uses no detail from passage. Sentence tells main idea and uses more than one supporting detail from the passage	Perfect very good	
Vocabulary Use	1 – 5	Unable to identify the meaning of words and its use based on the context	Lark	11
	6 – 10	Can identify the meaning of words and its use according to the context with fairly precise and accurate.	Good enough	
	15-20	Can identify the meaning of words and its use according to their context with a very precise and accurate	Perfect very good	
Author's Intention/purpose	1- 5	Can't identify the style and the author's intent in presenting ideas in written discourse.	Lark	14
	6 – 10	Can identify the style and the author's intent in presenting ideas in written discourse	Good enough	

	11-20	with precise and accurate enough Can identify the style and author's intent in presenting ideas in written discourse with very precise and accurate.	Perfect very good	
Explicit Question	1- 5	Can't identify the specific information that is stated in the passage.	Lark	13
	6 – 10	Can identify the specific information that is stated in the passage with fairly precise and accurate.	Good enough	
	11-20	Can identify the specific information that is stated in the passage with very precise and accurate.	Perfect very good	
Draw conclusions and inferences from written discourse	1 – 5	Can't to draw conclusions circuitry and accurately	Lark	15
	6 – 10	Can to draw conclusions and inferences of discourse with fairly precise and accurate	Good enough	
	11- 20	Can to draw conclusions and inferences from	Perfect ver good	

		written discourse with very precise and accurate		
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$$\begin{aligned} \text{The sum of the max. score} &= \frac{\sum \text{score of M. Choice} + \sum \text{score of essay}}{2} \\ &= \frac{100 + 100}{2} \\ &= 100 \end{aligned}$$

F. The Technique of Data Analyzing

After the researcher get the pre- and post-test data from the experiment class. The researcher will use a comparative technique. The comparative technique is used to evaluate hypotheses concerning the differences between the two tests, pre-test and post-test. The purpose of the data analysis is to know the effectiveness of GIST Strategy on the students' reading comprehension.

The formula is as follows:⁹

$$t_o = \frac{Md}{\sqrt{\frac{\sum x^2 d}{N(N-1)}}}$$

Where:

Md = The mean of differences between pre-test and post-test

$\sum x^2 d$ = Sum of quadrate deviation

N = Sum of samples

xd = The deviation of each subject

d.f = Degree of freedom

⁹Suharsimi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktis* (Jakarta: PT. Rineka Cipta, 2006), 307.

1. Determining the mean of differences between pre-test and post-test using this formula:

$$Md = \frac{\Sigma d}{N}$$

2. Determining the sum of quadrate deviation using this formula:

$$\Sigma x^2 d = \Sigma d^2 - \frac{(d)^2}{N}$$

3. Determining the degree of freedom using this formula:

$$d.f = N - 1$$

G. The Research Procedure

In general, the procedure of this research can be describes as follows :

1. The researcher give pre-test to the students in experimental class
2. Provide treatment of the experimental class
3. The comparison of score between pre-test and post test in experimental class
 - a. The experimental class
 - i. Preparation
 - Preparing the lesson plain (in appendix D)
 - Preparing materials that will be discussed
 - Design of group formation
 - ii. Implementation

- The teacher explain the process of implementation using the GIST Strategy
- The the teacher give the short passage that consist 3-5 paragraph to students
- The students read the passage individually .
- The students write the 10-20 words on the whiteboard
- Give the explanation of each words in their own words that have they read in the passage.
- The students summary 10-20 words based on the explanation of each words in whiteboard in their words

b. The comparison Score

- Provide pre-test and post-test to the experimental class
- Analyzing the collecting data from pre-test and post-test
- Drawing the interpretationbased on the result of the analysis of data collecting and make a conclusion

