CHAPTER III

RESEARCH METODHOLOGY

A. Research Method

In this research, the researcher uses the experimental research to know the real data that got from the respondent. Experimental research is a research method that tests the hypothesis which has the form of cause and effect relations by manipulating dependent variables during manipulating time, the writer has to control extraneous variables, perhaps the transitional that occurred really as an effect of manipulating which is out caused by other variables. Nunan, experiments are carried out in order explore that strength of relationship between variables. (david nunan research method n language newyork Cambridge univer press 1992 p. 24-25)

The data analysis uses is the quantitative research it means that the writer collects the data from the field and must go to place of the research. Moreover, in this research the writer uses quasi-experiment because in the research there will be pre-test and post-test get the data. Two classes where involved in this research, it is experimental class and control class. The experimental class consists

of the students who received treatment. However, the control class was not. Both classes received a pre-test on whatever instrument is used to assess the effect of the experiment before the treatment has been given. To make this research more clear, the writer provided the research design as follows:

Table: Research Design

No	Class	Pre-test	Treatment	Post-test
1.	Experimental class	X	X	X
2.	Control class	X	0	X

B. Place and Time

The writer takes a place of this research at the first grade of SMA Al-Irsyad Waringinkurung-Serang, which is located at Jl. Kramatwatu-Waringinkurung KM 3,5 Begogjaya. The writer chooses that school to conduct this research because students in SMA Al-Irsyad Waringinkurung felt difficult in English learning, and the learning strategy such as writing the whole text is not effective, it makes students were bored in English learning process.

The writer takes this place because the writer is one of teacher there, so make easy to research.

C. Population and sample

1. Population

The population of the research is students, especially the tenth grade of SMA Al Irsyad Waringinkurung. There are two classes in the tenth grade with 53 students.

2. Sample

The sample of this research is students at tenth grade of SMA Al Irsyad Waringinkurung. The researcher uses two classes. One class is X IPA that consist of 25 students as experimental class and the other one is X IPS that consist of 25 students as the control class.

D. Instrument and Technique of Data Collecting

The research used three kinds of research instruments namely test, observation, and interview. This technique is used in order to get specific data related to problems of research. The instruments of research will be discussed in the followings paragraphs.

1. Test

    According to Noam Chomsky "Test one of method or process to know about students' ability, knowledge or performance (skills) in a given domain"[24]. Then, in order to know how deep the students' ability in writing skill, the writer will use pre-test and post-test. Pre-test is the way to know understanding about text before treatment and post-test is the way to know understanding about text after treatment.

a. Pre-test

    The pre-test was performed to determine the initial state between the experimental group and the control group. The researcher will give the test before implementing scaffolding technique in teaching to know students' writing in narrative text and to get the data of their mastery writing of both two groups.

b. Post-test

    Post-test will be given at the end, after implementing scaffolding technique in experimental group and traditional

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[24]H. Douglas Brown, *Language Assessment Principles and Classroom Practice*, (Newyork: Longman, 2004) P. 3

method in control group to check the different significant in student's writing narrative text of two groups.

2. Observation

The writer observes the application activities of method and the way to learn writing skill in the class. In this case the researcher mentioned the condition of the class when teaching writing in narrative text. This information will be got from :

a. The student's enthusiastic in teaching writing in narrative text through scaffolding technique

b. The situation in the class of English subject, especially in teaching and learning writing skill through scaffolding technique.

3. interview

Interview is one of technique collecting data, information, or opinion with conversation and question-answer, both direct and indirect with data resource. This interview is referred to the students to get accurately data about their

perception of using "Scaffolding Technique" in teaching learning process in students' writing skill.

E. Technique of Data Analyzing

The technique used in this data analysis is the quantitative method and will be described in statistical form. To analysis data the writer uses t-Test. The t-Test is the most frequently used measure in second language research when comparing mean scores for two groups. It supposed to know whether experimental versus control class when taking the same test has the same score or not. The writer uses the following formula[25] :

1. To search Mean Variable X with formula :

$$M_X = \frac{\sum X}{N}$$

2. To search Mean Variable Y with formula :

$$M_Y = \frac{\sum Y}{N}$$

3. Determine the total square of error in experimental class, with formula:

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[25] Anas Sudjiono, *Pengantar Statistik Pendidikan,* (Jakarta: PT Raja Grafindo Persada, 2003). p. 317

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

4. Determine the total square of error in control class, with formula:

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

5. To calculate t_{-test} with formula :

6. $t = \dfrac{M_x - M_y}{\sqrt{\left(\dfrac{\Sigma x^2 + \Sigma y^2}{N_x + N_y - 2}\right)\left(\dfrac{N_x + N_y}{N_x.N_y}\right)}}$

M_X = Mean score of the experiment class

M_Y = Mean score of the control class

ΣX^2 = Sum of square deviation score in experiment class

ΣY^2 = Sum of square deviation score in control class

N_X = Number of students of experiment class

N_Y = Number of students of control class

2 = Constant number

7. Determine the t_{table} with formula:

$$df = N_X + N_Y - 2$$

F. Research Procedure

The procedure of this research can be described as follow:

1. Observation the English teaching activity, student and teacher

2. Provide pre-test of the experimental class and control class before the researcher gives treatments

3. Provide treatment to the experimental class by using Scaffolding technique, while the control class without using Scaffolding Technique.

a. Experimental Class

1) Preparation

Preparing the lesson plan

Preparing the materials and

Design the strategy of learning in the class

2) Implementation

− Preparing the students to ready and follow the lesson like praying, checking attendance, preparing lesson book, preparing assessing sheet, etc.

– Motivating students contextually what are the benefits of learning narrative text

– Explaining the goal of learning, competence, literation, and the characters to be achieved

– Teacher explains about the strategy

– Teacher explains the materials about narrative text, definition, the aims, generic structure, and language features of narrative text.

– Teacher gives eX IPAmple, and explains the generic structure and language features based on the eX IPAmple.

– Teacher invites the students' achievements or gives an opportunities to ask to teacher.

– Before teacher gives the task, teacher gives model of steps to making narrative text and students follow and try to make what teacher give.

– Teacher reduces to offer a help and feed back to students when students began to master contents.

– The teacher asks students to make narrative text. this step is scaffolding learning activities, students

development will in level, teacher still provides motivation in this process.

- After the task is done teacher checks and evaluates the learning

- Teacher invites the students to give argument and to explain the result of their task to other students.

- The teacher gives the feedback

b. Control Class

1) Preparation

- Preparing the lesson plan

- Preparing the materials that will be discussed

2) Implementation

- Preparing the students to ready and follow the lesson like praying, checking attendance, preparing lesson book, preparing assessing sheet, etc.

- The teacher asks the students to read the text

- The students are asked to answer question about narrative text

4. Provide post-test to the experimental class and control class.

5. Interview with the students experimental class about using scaffolding technique in learning process

6. Analyzing the data from pre-test and post-test

7. Drawing the interpretation based on the result of the analysis of data and making conclusion