

## **CHAPTER III**

### **RESEARCH METHOD**

#### **A. Research Design**

In this research, the writer uses *descriptive quantitative* method in which the writer tries to measure, describe, elaborate and analyze the comparison between the students' achievement of writing report text with and without using integrated reading and composition on ninth grade students of SMPN 24 Banjarmasin year 2016/2017.

Quantitative research focuses on numerical data that is analyzed using statistic method. Quantitative research basically is used for testing hypothesis and concluding the result to know the answer. By using it, the difference or the relation between the variables will be gotten. In doing so, the writer intend to use quantitative research to complete this study. Finally, the quantitative data are descriptively presented in tables and graphs.

#### **B. Population and Sample**

##### **1. Population**

Population is a group of elements or cases whether individuals, objects or events that conform to specific criteria and to which we intend to generates the result of the research (McMillan, 1996: 85) The population in this research is all ninth grade students of SMPN 23 Banjarmasin year 2016/2017 which consist of 203 students from six classes.

Next is the table showing the distribution students of the ninth grade of SMP Negeri 23 Banjarmasin

Table 3.1

## Research Population

No	Class	Students
1	IX A	34
2	IX B	34
3	IX C	34
4	IX D	34
5	IX E	33
6	IX F	34
<b>Total</b>		203

## 2. Sample

Sample is a part of the population being the real object of the research (Arikunto, 2006: 131). Fraenkel and Wallen (2012: 91) also state that a sample in a research study is the group on which information is obtained. The way to acquire the sample of research is by using purposive sampling. This type allows for researcher chooses the sample based on specific aim. From the teacher's information, it is found that students of class IX D and IX F have the similar characteristics. The sample has equal ability based on scores, so both classes are relevant to choose to be sample. The way in choosing which class using CIRC and without CIRC is by using random sampling. Class IX F as an experiment class

wich conducted the CIRC (34 students) and IX D as a control class wich is without CIRC (34 students) are the sample of this research.

### **C. Research Instrument**

The term of instrument according to Sheliger and Shomamy refers to any tool employed by the researcher to obtain information on the status of subject before the research commences (1989: 102). In this research, the writer uses some instruments, they are:

#### **1. Achievement Test**

Achievement test or ability test is mostly used in schools to measure learning or the effectiveness of instruction ( Fraenkel and Wallen, 2006: 129). This test is intended to measure an individual knowledge or skill in a given area or subject. The test used is a written test which asks the students to write down a report text based on the topics given.

#### **2. Observation Sheet**

The observation used is structured observation which means observer does the observation with aid of instrument such as checklist which guides the observer to the exact behaviors which are to be observed and recorded (Sheliger&Shomamy, 1989: 122). In this research, two kinds of observation sheet are used. They are the observation sheet for teacher and the observation sheet for students. Both are the performance checklist.

The observation sheet for teacher consists of items to determine how the teacher performs the cooperative learning type cooperative integrated reading and composition in teaching report text.

Meanwhile, the observation sheet for students also consists of items to determine the students' response during the implementation of the teaching and learning writing report text.

#### **D. Techniques of Data Collection**

Method of data collection is the way to collect data needed. There are some data needed to fulfill this research. The techniques of data collection are: observation and test.

##### **a. Observation**

Observation is a data collection tool, in which the researchers usually observe a number of behaviors taking place simultaneously, and it is most often used to collect data on how learners use language in variety of settings, to study language learning and teaching process in the classroom, and to study teacher's and students' behaviors (Seliger and Shohamy, 1989: 161-162). In this research, systematical observation is used in which the observation is guided by observation sheet. It consists of a list of activities which probably appears. Thus, the instrument that is used is checklist. The observation is aimed to see whether the procedure of teaching is acquired and fits the procedure of teaching designed in Lesson Plan (RPP).

##### **b. Test**

A test is a procedure used to collect data on subjects' ability or knowledge of certain discipline (Seliger and Shohamy, 1989:176). The test is a set of questions or exercises used to measure the ability, achievement, skill, intelligence,

and also aptitude of a person or a group of person. This research uses achievement test in which writer gives some exercises to measure students' achievement in writing report text. Students are given test to measure their achievement after they are treated and manipulated through the teaching technique. The other students are also given test to measure their achievement of writing report text without complementing the teaching technique.

The form of the test will discussed with the lecturer and also the English teacher. Report text is used in this research. Students are asked to write reported text in which the topic is the same as reading materials. There are several specifications will be scored in writing the text, such as content, organization, vocabulary, language use (grammar and sentence structure) and mechanism.

#### **E. Data Analysis**

Observation notes and result of test are data collected from this research. Analyzing data is done through steps below:

1. Editing, that is checked all document collected by giving check mark (√) in the list of document needed, so it is known whether the data are completed or not
2. Counting percentage, that is done to analyze of observation sheet by counting percentage of items in the teaching procedures which is implemented by the teacher. Those items are designed based on the design of teaching-learning process in the lesson plans.

To find the average percentage of the observation sheet, the formula below is used:

Checklist score X 100%

Highest score

3. Analyzing the test done through several steps as follow:

a. Counting and interpreting students' score

The test are assessed based on the following composition scoring rubric below:

Table 3.2 Composition Scoring Rubric of SMP Negeri 23 Banjarmasin

No	Elements	Score
1.	<b>Formats</b>	
	There is a title.	1
	The title is centered.	1
	The first line is indented.	1
	There are margins on both sides.	1
	The paragraph is double-spaced.	1
2.	<b>Punctuation and Mechanics</b>	
	There is a period after every sentence.	1
	Capital letters are used correctly.	1
	The spelling is correct.	1
	Commas are used correctly.	2
3.	<b>Content</b>	
	The paragraph fits the assignment.	5
	The paragraph is interesting to read.	5
	The paragraph shows that the writer used care and thought.	10
4.	<b>Organization</b>	
	The paragraph begins with a topic sentence that has both a topic and controlling idea.	10
	The paragraph contains several specific and factual supporting sentences that explain or prove the topic sentence, including at least one example.	20
	The paragraph ends with an appropriate concluding sentence.	5
5.	<b>Grammar and Sentence Structure</b>	
	Estimate a grammar and sentence structure score	35
<b>Total Score</b>		100

b. The researcher analyzes the data using t-test.

$$t \text{ test} = \frac{M_1 - M_2}{SE_{M_1 - M_2}}$$

$t \text{ test}$  : The result of counting which called as 't' observe

$SE_{M_1 - M_2}$  : Standard Error of Mean

$M_1$  : Mean of the first variable

$M_2$  : Mean of the second variable

There are some steps to process the data until the answer will be gotten, including:

**1. Looking for Mean Variable I as follows the formula:**

$$M_x \text{ or } M_1 = \frac{\sum x}{N_1}$$

**2. Looking for Mean Variable II as follows the formula:**

$$M_y \text{ or } M_2 = \frac{\sum y}{N_2}$$

**3. Looking for Standard Deviation for Variable I as follows the formula:**

$$SD_x \text{ or } SD_1 = \sqrt{\frac{\sum x^2}{(N-1)}}$$

**4. Looking for Standard Deviation for Variable II as follows the formula:**

$$SD_y \text{ or } SD_2 = \sqrt{\frac{\sum y^2}{(N-1)}}$$

**5. Looking for Standard Error of Mean variable I as follows the formula:**

$$SE M_1 = \frac{SD_1}{\sqrt{N_1 - 1}}$$

**6. Looking for Standard Error of Mean variable II as follows the formula:**

$$SE M_2 = \frac{SD_2}{\sqrt{N_2 - 1}}$$

**7. The writer counts standard error for Comparative Mean Variable I and Mean Variable II as follows the formula:**

$$SE_{M_1 - M_2} = \sqrt{SE M_1^2 + SE M_2^2}$$

**8. The writer counts t-test by using formula:**

$$ttest = \frac{M_1 - M_2}{SE_{M_1 - M_2}}$$

*ttest* : Value of t observation.

**9. After having the t-test score, the writer looks at the t table by counting t count:**

- Looking for Degree of Freedom:

$$df/db = (N_1 + N_2) - 2$$

*df/db* : Degree of Freedom

Consulting Score of “df/db” with “t table”:

*t table* : Value of Critic “t”

- In significant degrees t table 5 %
  - In significant degrees t table 1 %
- Making hypotheses Interpretation:
    - *Ho* (Zero Hypotheses) : There is no significant difference.
    - *Ha* (Alternative Hypotheses) : There is significant difference.



