

CHAPTER III
RESEARCH METHOD

A. The Research Design

The type of this research was quasi-experimental research. According to Cresswell, Experiment is you test an idea (or practice or procedure) to determine whether it influences an outcome or dependent variable.³⁴ Then, Gay and Airasian states that experimental research is “the only type of the research that can test hypotheses to establish cause-and-effect relationship”.³⁵

The design of this research was nonequivalent control group design, which used two groups as a sample. In conducting the research, the first year students at MAN 1 Pekanbaru were participated. The students were administered by giving pre-test at the beginning in order to know their abilities in writing. After that they were given the treatment in the middle. At the end, they were given post-test. In this research, the post-test both of two classes, experimental and control class were compared in order to determine the effect of using inductive writing strategy toward students’ ability in writing recount text. The design of the research can be illustrated as follows:

Table III.1
The Research Design

Select experimental group	Pretest	Experimental treatment	Posttest
Select Control group	Pretest	No treatment	Posttest

³⁴ Jhon. W. Cresswell. *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. (New Jersey: Pearson Education, 2008), p.229.

³⁵ L.R. Gay and Peter Airasian. *Educational Research Competencies for Analysis and Application. Six Ed.* (New Jersey: Prentice-Hall. Inc, 2000) p. 367

B. The Location and the Time of the Research

The research was conducted at MAN 1 Pekanbaru at Bandeng Street no. 51 A Pekanbaru. This research was conducted from September 10th to October 3rd 2013.

C. The Subject and the Object of the Research

Subject of the research was the first year students of MAN 1 Pekanbaru. The object of the research was the inductive writing strategy toward students' ability in writing recount text.

D. The Population and the Sample of the Research

The population of this research was all of the first year students of MAN 1 Pekanbaru. It had nine (9) classes. The total number of the first year students of MAN 1 Pekanbaru was 270 students. The writer used cluster sampling techniques in taking the sample. The sample of the research was divided into two groups. The first group was experimental class and the second group was control class. Each classes consisted of 30 students. It can be seen as follows:

Table III.2
The Total Population and Sample of the Research

No.	Class	Population	Sample
1	X 1	30	
2	X 2	30	Experimental Class
3	X 3	30	Control Class
4	X 4	30	
5	X 5	30	
6	X 6	30	
7	X 7	30	
8	X 8	30	
9	X 9	30	
Total		270	60

It seems that the population above is quite large to be taken as sample in the research. Based on the limitation of the research, the researcher took only two classes as the sample of this research. The classes were X.2 and X.3, one class as an experimental class taught by inductive writing strategy and other as control class taught by conventional strategy.

The sample of the research used cluster random sampling. It has to be a group, not individuals. According to Gay, all of the member of selected groups have similar characteristics.³⁶

³⁶ *Ibid.* p. 129

E. The Research Procedure

1. Experimental Group

a. Pre-test

The pre test was given after teaching in writing recount text without using inductive writing. It was used to measure the students' ability in writing recount text before they were taught by using inductive writing strategy.

b. Treatment

The treatment had been conducting for experimental group taught by using inductive writing strategy. Teacher gave explanation to the students what recount text was, and taught them how to write recount text by using inductive writing strategy. For applying inductive writing strategy, teacher asked to write recount text by using inductive writing strategy.

c. Post test

Posttest was given to the students after applying inductive writing strategy. The result of posttest was compared with the pretest to get the influence of this strategy and to know students' ability in writing recount text after taught by using inductive writing strategy.

2. Control Group

a. Pre-test

The control group was given pre-test to know their writing recount text. The test was the same as for experimental group.

b. Teaching by using Conventional strategy

Students were given the explanation about recount text by the teacher and asked them to write recount text.

c. Post-test

Posttest was given to the students after being taught by using conventional strategy. It was used to know whether the students were able to write recount text or not.

Table III.3
Topic of the Research

No.	The Topics	The Kind of Text
1	My Personal Experience	Recount text
2	My Birthday Party	Recount text
3	Travelling	Recount text
4	My Unforgettable Childhood	Recount text

Finally, the result of the test in experimental class and control class was compared. From the result, the writer knew, whether inductive writing strategy could influence writing recount text or not.

F. The Technique of Data Collection

The instrument used to acquire in this research was test. Test means measuring the knowledge, skill, feelings, intelligence, or aptitude of an individual of group.³⁷ It was used to measure the students' ability in writing recount text. The test was written test. The form of paragraph was recount text. The data of this

³⁷ *Ibid.* p. 367

research were the score of the students' writing ability in writing recount text could be measured by using writing assessment³⁸ used by the English teacher of MAN 1 Pekanbaru.

Table III.4
Writing Assessment

No	Aspects Assessed	Score			
		1	2	3	4
1	Content				
2	Organization a. Orientation b. Series of events c. Re-orientation				
3	Vocabulary				
4	Grammatical Features a. The use of action verbs b. The use of nouns c. The use of temporal connectives d. The use of past tense				
5	Spelling & Punctuation				
Total					
Maximum Score		20			

Explanation of score:

1 = incompetent

2 = competent enough

3 = competent

4 = very competent

$$\text{Final Score} = \frac{\text{TotalScore}}{\text{MaximumScore}} \times 80$$

G. The Reliability and the Validity of the Test.

For testing students' writing ability, the researcher used test to know reliability and validity. To know the validity of the test, the writer used content

³⁸ Jane B. Hughey, et al. *Op. Cit.* 140

validity. Content validity used by the writer in the test, which students asked to write about the topics related to the materials. Gay says that reliability is the degree which a test consistently measures whatever it is measuring.³⁹ Supported by brown reliability has to do with accuracy of measurement.⁴⁰ In obtaining the reliability of test, the writer used inters rater reliability. In this research, the writer used two raters to score the students' writing ability on recount text. Browns says that inter rater reliability occurs when two or more scores yield inconsistent scores of the same test, possibly for lack of attention to score criteria, inexperience, inattention or even preconceived biases.⁴¹ The score of judge 1 can be correlated to judge 2. To know the reliability of the test, the writer used product moment formula through SPSS 16.0 Version.

Correlations

		rater1	rater2
rater1	Pearson Correlation	1	.782**
	Sig. (2-tailed)		.000
	N	30	30
rater2	Pearson Correlation	.782**	1
	Sig. (2-tailed)	.000	
	N	30	30

** . Correlation is significant at the 0.01 level (2-tailed).

From the output above, it can be seen that r calculation is 0.782, to correlate to r table. Firstly obtained the degree of freedom ($df = n+n-2$), the df was 58, because $df = 58$ was not found, so the writer took $df = 60$ to be correlated

³⁹ *Ibid.* p.196

⁴⁰ H. Douglas Brown. *Language Assessment: Principles And Classroom Practices*. (New York: Pearson Education Inc, 2003), p. 19

⁴¹ *Ibid*, p. 21.

either at level of 5% and 1%. At the level 5% r table 0.250 and at level 1 % r table 0.325.

r calculation (r_o)	r table (r_t)
0.782	0.250 (5%) 0.325 (1%)

From the table above, the writer concluded that (r_o) is higher than (r_t) either at 5% and 1%. Thus, there is a significant correlation between score of rater 1 and rater 2. In other words, the writing test is reliable, because the reliability of writing test is moderate relationship.

H. Technique Of Data Analysis

In analyzing the students' ability in writing recount text, the writer used graduated standard of English lesson at MAN 1 Pekanbaru (SKL) that was 75 for students' ability in writing recount text. It means that for those who got score > 75, they pass the graduated standard (SKL), while for those who got score <75 they do not pass the graduated standard.

In analyzing the data of this research, the writer used T-test formula. Gay says that, T-test is used to determine whether two means are significantly different at a selected probability level.⁴² The writer used score of post test experimental class and post test of control class.

In analyzing the data, the writer used the statistical calculation of independent sample T-test. Independent sample T-test used to find out the significant influence of using inductive writing strategy toward students' ability in writing recount text. The T-table was employed to know whether there was any

⁴² L.R. Gay and Peter Airasian, *op cit.* p.196

significant influence between mean score both experimental and control class. The T-obtained value was consulted with the value of t-table at the degree of freedom $(df) = (N1+N2)-2$ which was statically hypothesis:

Ha: $t_o > t\text{-table}$

Ho: $t_o < t\text{-table}$

Ha is accepted if $t_o > t\text{-table}$ or there is effect of using inductive writing strategy toward students' ability in writing recount text.

Ho is accepted if $t_o < t\text{-table}$ or there is no effect of using inductive writing strategy toward students' ability in writing recount text.

The data were analyzed by using SPSS 16.0 version.