

CHAPTER III

METHOD OF THE RESEARCH

A. Research Design

The design of this research was a quasi experimental research which consisted of two variables; they are independent variable (x) that refers to the effect of using I-Search Procedure Method, and dependent variable (y) that refers to students' ability in writing analytical exposition paragraph. Creswell stated that "in experiment, quasi experiment is frequently used"¹ in doing researching. Blessing is also stated that Quasi-experiments are experiments that have treatments, pre-tests and posttests, but do not use random assignment.² In short, it was aimed to search whether there is an effect or not of treatment which has been done to the experimental subject without random assignment.³

The experimental research was identified by giving treatment to the sample as the independent variable in conducting this research, the researcher used two classes. The first class was used as a control class which was taught without using I-Search Procedure Method. the second class was used as an experimental class which was taught by using I-Search Procedure Method. The researcher gave pre-test and post-test to the experimental and control class. Only the experimental class was treated by using I-Search Procedure Method. The nonequivalent control group design is shown below".⁴

Experimental Group O _____ X _____ O

Control Group O _____ O

¹John W Creswell. *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. (New Jersey: Pearson Education Internationa, 2008), pp. 299

² Lucienne T.M. Blessing, Amaresh Chakrabarti. *DRM, a Design Research Methodology*. New York, 2009), pp. 266

³ Jhon W. Cresswell, *Op.cit* pp. 314

⁴*Ibid*, pp. 226

O = Test

X = Treatment By Using I-Search Procedure.

Table III. 2
Variables of the Research

Variable X	Variable Y
Using I-Search Procedure Method	Students' ability in writing analytical exposition paragraph

B. Time and the Location of the Research

This research was conducted at Senior High School of Muhammadiyah Bangkinang Kampar Regency. It was conducted from August to September month.

C. Subject and the Object of the Research

The subject of this research was the first semester of the second year students of Senior High School of Muhammadiyah Bangkinang Kampar Regency in the academic year 2012/2013. The object of this research was the effect of using I-Search Procedure Method toward students' ability in writing analytical exposition paragraph.

D. Population and the Sample of the Research

1. Population of the Research

The population in this research was the first semester of second year students at Senior High School of Muhammadiyah Bangkinang Kampar Regency in academic year of 2012/2013. There were two classes. The number of each class is shown in the table below:

Table III. 3
Population of the Second Year Students of Senior High School Muhammadiyah
Bangkinang Kampar Regency

No	CLASSES	Number of Students
1	XI IPA 1	25
2	XI IPA 2	25
4	XI IPS	30
TOTAL		130

2. Sample of the Research

In this research, the researcher used the cluster sampling as the technique to choose the sample of population. The class of XI IPA 1 and XI IPA 2 were selected as the sample of population. So, the sample of this research was XI IPA 1 consisting of 25 students that was used as the experimental class, and XI IPA 2 containing 25 students that was used as the control class.

E. Techniques of Collecting Data

To obtain the data that were needed in this research, the researcher used written test as a technique of collecting data. The students were tested by asking them to write analytical exposition paragraph. The researcher used written test in order to know the effect of using I-Search Procedure Method toward the students' ability in writing analytical exposition paragraph of the second year at senior high school of Muhammadiyah Bangkinang Kampar Regency.

Students' writing was measured by using writing assessment used by the teacher of English of senior high school of Muhammadiyah Bangkinang Kampar Regency as assessment standard in KTSP. The writing assessment provided some criteria that should be

No	Aspects Assessed	Score			
		1	2	3	4
1	Content				

measured by the teacher. It can be explained as follows:

Table III. 4

Writing Assessment of Analytical Exposition Text

2	Organization a. Thesis b. Argument c. Reiteration				
3	Vocabulary				
4	Grammatical Features a. Action Verb b. Temporal connectives c. Present Tense				
5	Spelling & Punctuation				
Total					
Maximum Score					20

Explanation of score:

1 = incompetent

2 = competent enough

3 = competent

4 = very competent

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

Table III. 5
Classification of Students' Score

SCORE	LEVEL OF ABILITY
80– 100	Very Good
66 –79	Good
56– 65	Enough
46-55	Less
0-45	Fail

F. The Technique of Data Analysis

In the technique of data analysis, the data were analyzed by using T-test. The researcher used SPSS 17 application to find out whether there was a significant effect of using I-Search Procedure Method toward students' ability in writing analytical exposition paragraph. The formula of t-test was:⁵

$$t_o = \frac{M_x - M_y}{\sqrt{\left(\frac{SD_x}{\sqrt{N-1}}\right)^2 + \left(\frac{SD_y}{\sqrt{N-1}}\right)^2}}$$

t_o = The value of t – obtained

M_x = Mean score of experimental sample

M_y = Mean score of control sample

SD_x = Standard deviation of experimental group

SD_y = Standard deviation of control group

⁵ Hartono. *Statistik Untuk Penelitian*. (Yogyakarta: Pustaka Pelajar, 2003), pp.193

The t-table was employed to see whether there was a significant on difference between the mean score of both experiment and control group. The t-obtained value was consulted with the value of t-table at the degree of freedom $(df) = (N_1+N_2) - 2$ statistically hypothesis:

- 1) H_0 is accepted if $t_0 < t - \text{table}$ or there is no significant effect of using I-Search Procedure Method toward students' ability in writing analytical exposition paragraph.
- 2) H_a is accepted if $t_0 > t - \text{table}$ or there is a significant effect of using I-Search Procedure Method toward students' ability in writing analytical exposition paragraph.

G. Validity and Reliability of the Test

The tests used to test students' writing ability should be valid and reliable. The test could be valid if it measures accurately what the test was appropriate, meaningful, and useful⁶. In this research, the researcher used content validity to know the validity of writing ability test. Content validity was partly a matter of determining if the content that the instruments contains is an adequate sample of the domain of content it is supposed to represent.⁷ Thus, the test was given based on the material studied by the students. The material of the test was taken from the textbook used by the second year students at Senior High School of Muhammadiyah Bangkinang Kampar Regency.

Reliability is the degree to which a test consistently measures whatever it is measuring. The testing of students' writing ability had to have reliability in order to get the same scores obtained when the tests done were more than once. In this research, the researcher used the rater agreement type of reliability concerned with inter rater reliability as

⁶ Arthur Hughes, *Testing For Language Teacher* (United Kingdom: Cambridge University Press, 2003), pp. 26.

⁷ H. Douglas Brown, *Language Assesment Principle and Classroom Practice*, (Longman, San Pracisco State University), pp. 22

the scores were given by two raters. The first rater was Yasir Amri, M. Pd and the second rater was Jondri Kasdi, S. Pd. I.

The Table of Reliability

Cronbach's Alpha	N of Items
.749	2

Based on the table above, it was clear that the reliability value was 0.749. According to Siregar, the tests will be able to be called as the reliability tests if the score of r_{11} is higher than 0.6⁸. The comparison between r_{11} and 0.6 can be written as follows:

$$0.749 > 0.6$$

It shows that the score of r_{11} was higher than 0.6, it means that the test was reliable.

⁸ Siregar, Syofian. (*Statistika Parametrik untuk Penelitian Kuantitatif: Dilengkapi dengan Perhitungan Manual dan Aplikasi SPSS Versi 17*), (Jakarta: Bumi Aksara 2013), 90.