

CHAPTER III

RESEARCH METHODOLOGY

A. RESEARCH DESIGN

This research is a Quasi-experimental research. According to John W. Cresswell, experiment is you test an idea (or practice procedure) to determine whether it influences an outcome or dependent variable. Quasi experiments is the research that consists of control and experiment group and use intact group not random.¹ According to Gay and Airasian, in order to receive permission to use school of children in a research, a researcher often has to agree to keep students in existing classrooms intact. The design of this research is quasi experimental design which uses non equivalent control group design.²

In this research, the reseacher took two classes in conducting this research; one class was as an experimental class taught by using blender method and other was control class taught by using traditional method. The writer assigned treatmetns to experimantal class and control class, administered a pretest to both groups, conducted experimental treatmentactivities with experimental group only and then administered a posttest to both groups in order to assess the significant effect onstudents'

¹Jhon W. Cresswell, *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. (New Jersey: Person Education, 2008), pp. 313-314

² L. R Gay and Peter Arisian, *Educational Research Competencies for Analysis and Application*. (New Jersey: Prentice-Hall Inc, 2000), p. 388

ability in writing narrative paragraph who are taught by using blender method and who are taught by using traditional method (three phase technique). According to Creswell, the research design can be illustrated as follows:³

Table III.1

The Research Design

Pre-test and posttest non equivalent control group design

Group	Pretest	Treatment	Posttest
VIII 1	T1	✓	T2
VIII 2	T1	-	T2

Where:

VIII 1 : Experiment group

VIII 2 : Control group

T1 : Pre-test for experimental and control group

✓ : Receiving particular treatment

- : Without particular treatment

T2 : Post-test for experimental and control group

B. The Time and The Location of the Research

This reserach was conducted at MTs Masmur Pekanbaru. It is located in Sokarno Hatta (Arengka 1) Sidomulyono street. It was conducted from January to February 2014.

C. The Subject and Object of the Research

³ Jhon W. Cresswell, op.cit., p.314

The subject of this research was the second year students of MTs Masmur Pekanbaru registered in 2014/2015. Meanwhile, The object of this research was using blender method and students' writing ability on narrative paragraph.

D. The Population and the Sample of the Research

The population of this research was the second year students at MTs Masmur Pekanbaru. The total population of this research was 60 students from two classes. The specification of the population can be seen on the table below:⁴

Table III.2
The Population of the Research

No	Class	Total Students
1	VIII 1	30
2	VIII 2	30
Total		60

According to Arikunto, if the amount of the population is less than 100 persons, it is better to take all of the population, but if the amount of the population is more than 100 persons, it is better to take 10-15%, 25%, or more.⁵ In the table above, it shows that the population of the second year students at MTs Masmur Pekanbaru was less than 100. The writer used total sampling in taking the sample because the total population was less

⁴ Citra Amelia, *Second Year Students' Absensi of MTs Masmur Pekanbaru*. (Pekanbaru: Unpublished, 2013/2014).

⁵ Suharsimi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktik*, (Jakarta: Rineka Cipta, 2006), p. 134

than 100 students that consisted of two classes which the VIII 1 as control class and VIII 2 as experimental class of this research. Therefore, the total of participants was 60 students.

Table III.3

The Total Sample of the Research

No	Class	Male	Female	Total Number of Student
1	VIII 1	13	17	30
2	VII 2	12	18	30
	Total	26	35	60

E. The Technique of Collecting Data

In this research, the researcher used writing test as an instrument to collect the data. There are many type of writing tests, one of them is intensive (controlled) writing. According to Brown, intensive writing is as form-focused writing, grammar writing, or simply guided writing and the good deal of this writing level is display writing as opposed to real writing: students produce language to display their competence in grammar, vocabulary, or sentence formation, and not necessarily to convey meaning for an authentic purpose and these type is applied for Junior High School.⁶

The test was given twice. The first was pre test and the last was post test. Pre test was given before the treatment and post test was

⁶H. Douglas Brown, *Language Assesment: Principles and Classroom Practice*. (San Francisco State University: Longman, 2003), p. 225

given after doing the treatment. Test was used to collect the data of students' writing ability on narrative paragraph. The test was intended to obtain students' writing ability on narrative paragraph at the second year of MTs Masmur Pekanbaru.

The students' writing ability on narrative paragraph was measured by using writing assessment used by the English teacher of MTs Masmur Pekanbaru as an assessment standard in KTSP.

Table III.4
Writing Assessment

NO	ASPECT ASSESSED	SCORE			
		1	2	3	4
1	Content				
2	Organization a. Orientation b. Complication c. Resolution				
3	Vocabulary				
4	Gramatical Features a. Action Verb b. Temporal Connectives c. Past Tense				
5	Spelling and Punctuation				
	Total				
	Maximum Score				20

Five aspects above were used to assess students' ability in writing narrative paragraph. The result was analyzed to get the gain, from the gain, the researcher could conclude whether blender method was an effective method to improve students' ability in writing narrative paragraph or not.

1. The Validity and the Reliability of the Test

The tests used had the validity and reliability. A test is said to be valid if it measures accurately what it is intended to measure.⁷ In the research, the writer used content validity. According to Sugiyono, content validity is a kind of test that is used to measure achievement and the effect of treatment or program. To measure achievement, the test must be created based on appropriate material, easy to be comprehended or suitable with student's level.⁸ The test of the research was appropriate to students' knowledge and it was familiar materials to the students' daily life.

Besides, reliability in quantitative research is essentially a synonym for dependability, consistency, and replicability over time, over instruments and over groups of respondents⁹. Ary stated that, reliability is the extent to which an instrument is consistent in measuring whatever it is measuring¹⁰. According to Gay, reliability is the degree to which a test consistently measures whatever it is measuring¹¹. It is reflected in obtaining how far the test or instrument test is able to measure the same subject on different occasions indicating the similar result. In short, the

⁷Athur Hughes. *Testing for Language Teachers*. Canada: Cambridge University Press, 2003), p. 26

⁸Sugiyono. *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, kualitatif, dan R & D*, (Bandung: Alfabeta, 2011), *Op Cit*, p. 176

⁹Louis Cohen, et al, *Research Method in Education, Sixth Edition*, (New York: Routledge, 2007), p. 146

¹⁰Donald Ary, et al., *Introduction to Research in Education*. (Canada: Wadsworth, Cengage Learning, 2006), p. 236

¹¹L.R. Gay and Peter Airasian, *Op. Cit.*, p. 169

characteristic of reliability is sometimes termed consistently. It is clear that reliability is used to measure the quality of the test scores and the consistency of the test.

According to Creswell, there are five types of reliability. They are test-retest reliability, alternate forms reliability, alternate forms and test retest reliability, interrater reliability and internal consistency reliability¹². Gay says that “inter judge reliability can be obtained by having two (more) judges independently score to be compared to the score of both judges.”¹³ In this research, the writers used inter rater reliability, because the researcher had two raters in order to assess the students’ writing ability.

The writer used *Pearson Product Moment* formula by using SPSS 16 version to obtain the correlation between scores from rater 1 and rater 2. Then, to know the level of the correlation, the r_o is process through *Spearman-Brown Prophecy formula* as follows:¹⁴

$$r_{tt} = \frac{n r_{AB}}{1 + (n-1) r_{AB}}$$

Where,

r_{tt} = inter-rater reliability

n = the number of raters whose combined estimates of the final mark

¹² Jhon. W. Creswell. *Op Cit*. P.170

¹³ L.R. Gay and Peter Airasian. *Op Cit*. P. 175

¹⁴ Grant Henning, *A Guide to Language Testing; Development, Evaluation, and Research*, (Boston: Heinle&Heinle, 1987), p.85

$r_{A,B}$ = the correlation between raters, or the average correlation among all raters if there are more than two

The writer used the categories of reliability that can be seen from the following table.

Table III. 5
The Categories of Reliability

No	Reliability	Level of Reliability
1	0.0 – 0.20	Low
2	0.21 – 0.40	Sufficient
3	0.41 – 0.70	High
4	0.71 – 1.0	Very high

(Taken from Tinambunan in Meltiawati in Zelly)¹⁵

Table III.6
Correlations

		rater1	rater2
rater1	Pearson Correlation	1	.752**
	Sig. (2-tailed)		.000
	N	30	30
rater2	Pearson Correlation	.752**	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_o (r_{obtained}) is 0.752 will be correlated to r_t (r_{table}). It is necessary to find the df (degree of freedom).

¹⁵Zelly Putriani, *The Correlation between Reported Speech Mastery and Speaking Ability of the Second Year Students of SMKN 1 Pekanbaru*, (Pekanbaru: Unpublished, 2011), p. 35

$$df = N - nr$$

df : degree of freedom

N : Number of cases

nr : number of correlated variable

$$df = 30 - 2 = 28$$

The writer took $df = 28$ to be correlated either at level of 5% or 1%. At level of 5%, r_{table} is 0.361; while at level of 1% r_{table} is 0.463. Thus, the $r_{obtained}$ is obtained higher than r_{table} , either at level of 5% or 1%. So the writer concluded that there is a significant correlation between score given by rater 1 and score given by rater 2. In the other words, the writing test is reliable.

Then, it was calculated by using Spearman-Brown Prophecy Formula as follows:

$$r_{tt} = \frac{n r_{A,B}}{1 + (n-1) r_{A,B}}$$

$$r_{tt} = \frac{2(0.752)}{1 + (2-1)0.752}$$

$$r_{tt} = \frac{1.504}{1.752}$$

$$r_{tt} = 0.858$$

Based on the data obtained above, the writer concluded that the inter-rater reliability in this research was 0.858 categorized into very high level.

F. The Technique of Data Analysis

In order to analyze students' ability in writing narrative paragraph, the researcher used scores of pretest and posttest of the experimental and control classes. The researcher used pre-test and post-test in the classroom and writing was assessed based on school's writing assessment. While the last result of the test was analyzed statistically by using 't' test formula through SPSS 16 version.