

CHAPTER III

RESEARCH METHOD

A. Research Design

The type of this research was an experimental research. According to Gay and Airasian, experimental research is “the only type of the research that can test hypothesis to establish cause and effect relationship”¹. Then, Jhon W. Cresswell stated that experiment is you test an idea (or practice or procedure) to determine whether it influences the outcome or the dependent variable².

The essential feature of experimental Research is that investigators deliberate control and manipulate the conditions which determine the events, in which they are interested, in introducing an intervention and measuring the difference made. So, in this research the writer practiced the fluency oriented reading instruction at the second year students of Junior High School 1 Tualang to determine whether it influences the students’ reading fluency.

The design of this research was quasi-experimental design, which used pretest-posttest non equivalent control group design. In this research, the writer used pretest and posttest design. The writer took two classes in conducting this research: one class was as experimental

¹ L.R. Gay and Peter Airasian. *Educational Research Competencies for Analysis and Application. Six Ed.* (New Jersey: Prentice-Hall, Inc, 2000), p.367

² Jhon. W. Cresswell. *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research.* (New Jersey : Pearson Education, 2008),p.299

class taught by fluency oriented reading instruction and other was control class taught by traditional method. The writer assigned treatment to experimental class and control class, administered a pretest to both groups, conducted experimental treatment activities with experimental group only and then administered a posttest to both groups in order to assess the significant effect of students' reading fluency in narrative text taught by using fluency oriented reading instruction and taught without using fluency oriented reading instruction. The design of this research can be illustrated as follows:

Table III.I
Research Design

Class	Pretest	Treatment	Posttest
Class VIII 1	T 1	✓	T 2
Class VIII 2	T 2	-	T 2

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

After giving particular treatment to the experimental group by using fluency oriented reading instruction, the scores between experimental and control group were analyzed by using fluency oriented reading instruction. It was aimed to know there was or there was no

effect of variable X into variable Y. The design of variable relationship can be illustrated as follows:

Table III.2
Variable Design



B. Location and Time of the Research

This research was conducted at the second year students of SMPN 1 Tualang Perawang. It was conducted from April to Mei 2014.

C. Subject and Object of the Research

The subject of the research was the second year students of SMPN 1 Tualang Perawang. The object of the research was students' reading fluency.

D. Population and Sample of the Research

The population of this research included all of the second year students of state Junior High School 1 Tualang. It had ten classes. The number of the second year students at state Junior High School 1 Tualang was 286 students.

Table III.3
The Total Population of the Second Year Students of
SMPN 1 Tualang 2013-2014

No	Class	Total
1	VIII 1	28
2	VIII 2	28
3	VIII 3	29
4	VIII 4	29
5	VIII 5	27
6	VIII 6	28
7	VIII 7	27
8	VIII 8	28
9	VIII 9	28
10	VIII 10	28

The population above was large to be taken all as sample of the research. Because all samples had the same characteristic or homogenous the writer used cluster sampling. So the writer used 2 classes of 10 classes to be taken as samples. The writer randomly choose class VIII 1 as an experimental group and class VIII 2 as control group. The experimental group consisted of 28 students. So, 56 students were representative enough to be a sample of the research.

Table III.4
The Sample of the Second Year Students at SMPN 1 Tualang 2013-2014

No	Class	Population		Total
		Male	Female	
1	VIII 1	10	18	28
2	VIII 2	10	18	28
	Total	20	36	56

E. The Technique of Collecting Data

In this research, the writer used oral reading test to collect the data. The writer used test as the instrument. 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 given after doing the treatment. Test was used to collect the data of students' reading fluency in narrative text. The test was intended to obtain students' reading fluency in narrative text at the second year of SMPN 1 Tualang Perawang.

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.³ In the research, the writer used content validity. 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 respondents⁴. According to Gay, reliability is the degree to which a test consistently measures whatever it is measuring⁵. It is reflected in obtaining how far the test or instrument test is able to measure the same subject on different occasions indicating the

³ Athur Hughes. *Testing for Language Teachers*: (Cambridge University Press, 2003), p. 26

⁴ Louis Cohen, et al, *Research Method in Education, Sixth Edition*, (New York: Routledge, 2007), p. 146

⁵ L.R. Gay and Peter Airasian, *Op. Cit.*, p. 169

similar result. In short, the 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 reliability⁶. Gay said that “inter judge reliability can be obtained by having two (more) judges independently score to be compared to the score of both judges.”⁷ In this research, the writer used inter rater reliability, because the writer had two raters in order to assess the students’ reading fluency.

The writer used *Pearson Product Moment* formula by using SPSS 19 version to obtain the correlation between scores from rater 1 and rater 2. 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)⁸

⁶ Jhon.w.cresswell. *Op Cit.* P.170

⁷ L.R. Gay and Peter Airasian. *Op Cit.* P. 175

⁸ Zelly Putriani, *The Correlation between Reported Speech Mastery and Speaking Ability of the Second Year Students of SMKN 1 Pekanbaru*, (Pekanbaru: Unpublished, 2011), p. 35

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 correlated to r_t (r_{table}). It is necessary to find the df (degree of freedom).

$$df = N - nr$$

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 5% or 1%. At level 5%, r_{table} is 0.361; while at level 1% r_{table} is 0.463. Thus, the r_{obtained} is higher than r_{table} , either at level 5% or 1%. So the writer concluded that there was a significant correlation between score given by rater 1 and score given by rater 2. In other words, the reading fluency test was reliable.

F. The Technique of Data Analysis

In order to analyze students' reading fluency in narrative text, the writer used scores of pretest and posttest of the experimental and control class. The writer used pre-test and post-test in the classroom and reading fluency was assessed based on school's reading assessment. While the last result of the test was analyzed statistically by using 't' test formula through SPSS 19 version.

To answer the questions of formulation, first the writer analyzed the data by using percentage of students' categories, second the writer used the percentage of students categories, and the last writer used 't' test formula SPSS 19.

The result was analyzed to get the gain, from the gain, the writer could conclude whether fluency oriented reading instruction was an effective method to improve students' reading fluency in narrative text or not.