CHAPTER III

RESEARCH METHOD

This chapter presents the research method. It focussed on the method used in conducting this study. It consists of the research design, the setting and subject of the study, the instruments for collecting data, data source, and data analysis.

A. Research Design

This research used quantitative approach. It was designed to be an Quasi - experimental research. Quasi experiment is a research design having some but not all of the characteristics of a true experiment. The element as frequently missing is random assignment of subjects to the control and experimental condition between two factors which are deliberately appeared by eliminating other irritating factors. Both of the groups take pretest and post test and only experimental group takes the treatment. The quasi-experimental design was when the writer took two classes, the experimental class and controlled class. The writer taught the students in experimental class by using EGRA strategy and in controlled class using conventional strategy. It was given to know the effectiveness of EGRA strategy on students achievement in writing.

In this research the researcher use non randomized control group, pre-test, post-test design. According to Ary *et al*. (2010:316) non randomized

control group pre-test, post-test design is one of the most widely used Quasi-Experimental designs in educational research.

This research consisted of two variables, they were: Independent variable (variable x) that referred to the effect of EGRA Strategy and dependent variable (variable y) that referred to writting ability.

Table 3.1

Research Design

Group	Pre – Test	Treatment	Post – Test
Experiment Group	y1	X	y2
Control Group	y1	-	y2

Experimental Group (VIII - C) y1—— x—— y2

Control Group (VIII - D) y1———— y2

Y1 = Pre-test

Y2 = Post - test

X = Treatment by using EGRA Strategy

B. Population, Sample and Sampling.

a. Population

As stated in Sugiyono (2010:117), population is generalization area consisting of objects or subjects that have certain quality and characteristics decided by the researcher to be researched and be taken the conclusion then.

The population used to conduct this research was the eighth graders of State Junior High School 2 Pakel in the academic year of 2019/2020. It is

located at Jl. Raya Campurdarat, Pakel, Campurdarat, Tulungagung. The total population was 273 students consisting of 120 male students and 153 female students which spread to into 10 classes; VIII-C up toVIII-D. Eighth grade students were chosen because based on the curriculum 2013 applied in that school.

b. Sampling

As stated in this research, the technique used in talking sample is purposive random sampling technique. In this research, the researcher used non probability sampling that was purposive sampling. A purposive sampling also referred to as judgment sampling sample elements judged to be typical, or representative, are chosen from the population (Ary et al, 2010:156). In this study, applying purposive sampling in choosing the sample, the researcher used the following reason. The reason was the researcher chose the class that had average ability. This class was identified as a normal class, the selected classes to would tend to develop when they were given a stimulation or a traetment by using EGRA strategy and a conventional method.

Table 4.1

Pre-test and Post-test desaign

Control Grup	Pre Test	To be given by conventional method	Post test
Experimental Group	Pre Test	To be given by stimulation of EGRA	Post Test

c. Sample

In order to study the population more effectively, the researcher selected the sample. Sample, according to Sugiyono (2010:118) is part of the total and the characteristics of population which is researched. A good sample is one that representative of the population from which it was selected. As a sample, the researcher select VIII-C and VIII-D 2 classes. And then, VIII-C as an experimental class, and VIII-D as a control class. Those were as the sample of the research by number of the students, 40 ; 20 students for experimental and also 20 students for control class.

C. Research Instrument

Instrument of the research is a tool used by the researcher in collecting data. The instruments used in this research were as follows :

1. Pre-test

Pre-test was given to the class before getting treatment about EGRA strategy for experimental class and Conventional Technique for control class. The form of pre-test was writing test. The researcher asked the students to write a recount text based on the given topic in the form of pictures (Clue Crard). Than, there researcher asked students to observe it and write base on their pictures. In assessing students' writing ability, the

researcher used scoring rubric that consisted of five items: Content, Organization, Grammar usage, Structure and Vocabulary.

2. Post-test

The post-test was carried out after providing some treatments by using EGRA strategy in the learning process. It was conducted on 22nd April 2019 for experimental group and 25th April 2019 for control group. The post-test was done to measure the students' achievement in writing recount text after they were taught by using EGRA strategy. About the time allocation of post-test was similar with pre-test, it was 60 minutes.

D. Validity and Reliability Testing

Validity and reliability testing are the important part since the test is used as an instrument to collect the data. The validity and reliability were used to ensure that the test was suitable to use.

1. Validity

The most complex criterion of an effective test and the most important principle of language testing is validity. According to Ary et al (2010: 225) validity is the most important consideration in developing and evaluating measuring instruments. Validity was defined as the extent to which an instrument measured what it claimes to measure. The focus of recent views of validity is not on the instrument itself but on the interpretation and meaning of the scores derived from the instrument. In this research, the researcher used some validity testing as follows :

a. Content Validity

Content validity is a test where the test can measure a certain objectives that appropriate with the material or the content of learning that is given (Arikunto, 2006: 82). It means that the content of test must appropriate with the material that exist in the curriculum. Moreover, the instrument in this research fulfilled the requirement of having content validity since the test was designed based on the standard and basic competence in K13.

Table 3.1

Matrix of standard Competence and Basic Competence in K13 Curriculum

Standard Competence	Basic Competence
1.4 Responding the meaning and creating an oral and written text, by using text structure correctly, language element accurately, thanking and fluently.	4.7.2 Making a simple recount text about people, animals and things in oral and written that attention with the social function, text structure, and language element as right and based on the context.

Based on the matrix above, it can be seen that recount text was one of the text that must be mastered by the 8th grades students of Junior High School in K13 curriculum. So, the content of the test in this study used descriptive text, since it was suitable for 8th grades.

b. Construct validity

A test is said to have construct validity if every question in the test measures every thinking aspect (Arikunto, 2006: 83). Construct validity deals with the relationship between a test and a particular view of language and language learning. The word construct refers to any underlying ability which is hypothesized in a theory of language ability. So, this construct validity refers to the theory of language learning.

Here, the researcher used construct validity in administering writing test and the technique of scoring students' writing ability based on four categories of writing recount text that adopted from the internet, they were: topic, proof of description, relevance of supporting facts and details, and language feature. Then, the researcher adapted and modified the scoring rubric from Cohen (1994: 328-329) in Isnawati's book (2014: 75). They were as follows :

Table 3.2

Scoring rubric for recount text

Aspects	Explanation	scores

Content	• Main ideas stated clearly and accurately, change of opinion clear. • Main ideas stated fairly, clearly and accurately, change of opinion relatively clear • Main ideas somewhat, unclear and inaccurate, change of opinion somewhat weak • Main ideas not clear or accurate, change of opinion weak • Main ideas not all clear or accurate, change of opinion very weak	25 23 20 19 15
Organization	• Well organized and perfectly coherent • Fairly well organized and generally coherent • Loosely organized but main idea clear, logical but incomplete sequencing • Ideas disconnected, lacks logical sequencing • No organization, incoherent	20 18 15 13 10
Grammar	• No errors, full control of complex structure • Almost no errors, good control of structure • Some error, fair control of structure • Dominated by errors, no control of structure • Many errors, poor control of structure	20 18 15 13 10
Vocabulary	• Very effective choice of words and use of idioms and word form • Effective choice of words and use of idioms and word forms	20 18

	• Adequate choice of words but some miss use of vocabulary, idioms and word form • Limited range, confused use of words, idioms, and word for • Very limited range, very poor language of words, idioms, and word form	15 13 10
Mechanic	• Mastery of spelling and punctuation • Few errors in spelling and punctuation • Fair number of spelling and punctuation errors • Frequent errors in spelling and punctuation • No control over spelling and punctuation	15 13 10 8 5
The total number gotten 100 *The maximal score*		

From the table above, the researcher made a rating scale to classify the result of score that each students got. The rating scale was consisted of range of score, grade, and criteria. It can be seen below :

Table. 3.3

Rating Scale

No.	Range of score	Grade	Criteria
1.	85 – 100	A	Excellent
2.	84 – 70	B	Good
3.	69-55	C	Fair
4.	54-50	D	Poor

5.	49-0	E	Very Poor

c. Face validity

Face validity is a term sometimes used in connection with a test's content. Face validity refers to the extent to which examinees believe the instrument is measuring what it is supposed to measure (Ary et al, 2010: 228). The test in this study was designed to measure students' writing ability in recount text. In this test, there were some aspects to be considered from this test to make a good test based on the face validity. They were :

1) In this test, the instruction was clear for the students, so the students were able to understand what they should to do in the test.
2) In this test, the students of 8^{th} grades were instructed to write a recount text. Thus, the researcher gave topics that were suitable with their level. In this test, the researcher used guided topic.
3) The consideration of time allocation was suitable. So, the students could finish their writing well. In this test, the researcher gave the time allotment about 40 minutes.

2. Reliabitity

According to Lodico, et al (2006: 87) reliability refers to the consistency of scores, that is an instruments' ability to produce

"approximately" the same score for an individual over repeated testing or across different raters. It means that reliability is the consistency of the instrument in producing the same score on different testing occasions or with different raters.

a. SPSS Correlation

		Rater 1	Rater 2
Rater 1	Pearson Correlation	1	.797**
	Sig. (2-tailed)		.000
	N	29	29
Rater 2	Pearson Correlation	.797**	1
	Sig. (2-tailed)	.000	
	N	29	29

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

The table is the result of calculation by using Pearson Product Moment formula. It shows that the value is 0.797. The significance value is 2- tailed. According to Hughes (1989:40) the ideal reliability coefficient is 1. Where the result closed to 1, it means that the test is reliable. On the contrary, where the result of reliability coefficient is zero, it is not reliable. To sum up, based on the result of calculation gained in this research, the researcher conclude that the instrument is reliable because it has reliability coefficient 0.797

Before the test was given, the researcher conducted a try-out for the instrument to the different subject. Before doing the try-out, the

researcher consulted the instrument with two experts. They were the researcher's adviser and the English teacher of SMPN 2 Pakel. After that, the researcher conducted the try-out for 70 students of C class. It was done on 27th April 2019 The try-out was held to know how far the reliable of the test.

After doing the try-out, it can be concluded that the test was suitable to used. The time allotment and topics that the researcher gave was appropriate. The students can finish the test at the time and they were not confused with the topics because it was familiar for the students.

E. Collecting Data

The method of collecting data used in this research was administering test. The researcher used writing test to measure students' writing ability.

1. Pretest

The researcher gave the pretest for both treatment and control class to know the students'recount writing ability before being given the treatment. In this research, the researcher gave the pretest to treatment class or VIII-C on 21st April 2019, at 08 : 15 AM - 09 : 20 AM . The researcher also gave the pre test to control class or VIII-D on 25th April 2019, begin at 10 : 10 AM - 11 : 20 AM. The reseacher give a picture and ask the students to make a recount text.

2. Treatment

The researcher applied EGRA as treatment in treatment class and Conventional Technique in control class. In exsperiment class the researcher gave the treatment for three times. In doing the test, the students were asked to write the recount text based on the given topics. The researcher provided five topics and divided the clas into 5 groups.

The representative of the group chose one of the topic and discuss it. Theacher leads the students about the picture and then all of the students make a story based on their experience. In this test, the students were allowed to use dictionary because the researcher considered that the sample was the 8th grade in which their vocabulary mastery still less. The students were given time allotment 40 minutes to do the test. After administering the test, the researcher scored the students' writing based on the made of scoring rubric for recount text.

3. Post Test

The researcher gave the post-test to know the students' recount writing ability after being gotten the treatment for treatment and control class. The researcher gave the post-test for treatment class on 24th April 2019, begin at 11 : 20 AM - 12 : 10 AM and control class was on 27th April 2019, begin at 08 : 15 AM - 09 : 00 AM.

F. Data analysis

In this research, the researcher used a quantitative data analysis technique. The quantitative data of this research was analyzed by using

statistical method.The data collected from pre-test and post-test students taught by using EGRA strategy in exsperiment class and by using Conventional Technique in control class. To know any significant different students' score on narrative speaking between both of class and to know the effectiveness of EGRA strategy on students' recount writing, the researcher used Independent Sample T-Test through SPSS 16.0 for window.

If the result of t-test was bigger than at the level of significant 0.05, the null hypothesis could not be rejected, indicated that EGRA strategy was not effective on the students recount writing. And if the significant level was lower than t-test at the level of significance 0.05, the null hypothesis could be rejected indicating that EGRA strategy was effective toward students' recount writing skill.

G. Hypothesis Testing

Hypothesis testing is used to test the hypothesis of the research. It was to test whether the null hypothesis (Ho) was rejected or not. In this study, they were two kinds of hypothesis, they are Ha (Alternative Hypothesis) and Ho (Null Hypothesis). Ha said that there is significant different score in writing descriptive text between the students taught by using EGRA Technique of 8^{th} grade of SMPN 2 Pakel. Then, Ho said that there is no any significant different score in writing recount text between the students taught by using EGRA strategy and those taught by using conventional technique of 8^{th} grade of SMPN 2 Pakel.

The hypothesis was tested by using t-test through SPSS 16.0 version. The interpretations to test the hypothesis were stated as follow :

Since the value of t_{count} is bigger than t_{table} and is smaller than 0,05, it means that the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected. Therefore, it can be concluded that there is significant diference on student's score in speaking ability between those who were taught by using plus, minus interesting strategy and those who were not.

1. If the value of t_{count} (equal variance assumed) is higher than t-table in the significant level at 5%, the Ho (Null Hypothesis) is rejected and Ha (Alternative Hypothesis) is accepted. It means that there is significant different score in writing recount text between the students taught by using EGRA strategy and those taught by using conventional method.
2. If the value of t_{count} (equal variance assumed) is lower than t-table in the significant level at 5%, the Ho (Null Hypothesis) is accepted and Ha (Alternative Hypothesis) is rejected. It means that there is no significant different score in writing recount text between the students taught by using EGRA strategy and those taught by using conventional method.