CHAPTER III

RESEARCH OF METHODOLOGY

This chapter describe about the method which is used in this study and the subject being concerned. It includes research design, variable, population and sample, research instruments, data collection and data analysis.

3.1. Research Design

The researcher employed quantitative research, quantitative research is research which used collect data technique using statistical to check the effect of the study (Arifin, 2010:14). The research using quasi experimental design to conduct this study. Quasi experimental used because it is the appropriate research design to allow the school schedule and rule (Cohen, Manion, & Morrison, 2007). Based on Trochim (2006) quasi experimental design is a research design that has several key aspects of randomized experimental design, such as pre-post -test as a measure tool and treatment-controlled group comparison.

Therefore, in this study the experimental group was taught using creative task strategy (game) and in control group which taught using think pair share strategy. In the first meeting it was pre-test distribution, the following meetings were treatment for experimental group that is teaching writing recount text by using creative task strategy (game), but for control group uses slide presentation as media of teaching recount text. Then, the last meeting, the post-test were delivered to both group, experimental and control group. The following chart can see in figure below.

Table 5. Design of Experimental Research

Group	Pre-test	Treatment	Post-test
Experimental	X	√	Y
Control	X	-	Y

Where :

√   : Treatment

X   : Pre-test

Y   : Post Test

3.2. Population and Sample

This study is conducted in SMA 45 Gresik in academic year of 2017 /
2018. The population and sample will discussed as follow:

3.2.1. Population of the Study

Population is all people that want to be investigate. Based on Tuckman
(1978 : 227) population is a group about the researcher is interested in gaining
information and drawing conclusion. In this study the researcher interested out
the improvement in writing recount text mastery of year tenth grade students of
SMA 45 Gresik academic year of 2017/2018 due to the implementation of
creative task.

3.2.2. Sample of the study

In this study the researcher used nonprobability sample that is purposive
sampling. Based on Laerd purposive sampling is a nonprobability sampling which
the investigated units are based on the researcher's decision. Therefore, the

sample of this study is students in X-A and X-B class of SMA 45 Gresik. The consideration of choosing the sample because in that school just have two classes.

3.3. Research Variable

In this study the research variable divides into two those are independent and dependent variable. Dependent variable is a variable that cannot be observed by its own (Nugroho, 2015), the dependent variable of this study is students' achievement in writing recount text to the year tenth grade students of SMA 45 Gresik year of 2017/2018. The independent variable is a variable which gave effect to the dependent variable and it is based on the researcher consideration (Brown, 2005: 10). In this study the independent variable is the effect of creative task on students writing recount text of the tenth grade on SMA 45 Gresik.

3.4. Research Instrument

A tool to collect data and make easy to process it is a research instrument. In this study the researcher uses test as the main instrument. As additional instrument the researcher uses observation sheet, students' questionnaire, and teacher's interview.

3.4.1. Test

In gaining the research data the researcher should use the appropriate instrument one of them is test. Based on Brown (2004: 3) test is a measurement tool to measure the student's ability. In this study, test used to measure the students writing skill of the experimental group and control group. The researcher

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used 2 kinds of text those are pre-test and post-test for both experimental and control group.

3.4.1.1. Pre-test

The pre-test will be given before the students get the treatment. It's from written test to measure students' writing skill on recount text. The researcher asks the students to compose the recount text based on their experience. From the result the researcher

3.4.1.2. Post-test

Post test is to find out whether the students make progress in their writing skill or not. Post test will be given after the students get the treatment which is creative task strategy for experimental group and guided writing strategy for control group. The test in this research is written test, specially recount text. Post test become comparator between experimental group and control group

3.4.2. Validity of test

Checking the validity of the item is needed to check whether the item already valid or not. It done before the pre and post-test delivered to the students. The instrument called valid if it already match with the objective of the research and should be measured what to measured (Winterstein, 2008). One of the validity types is content validity. Based on Yaghmaie (2003) content validity is a measure tool to know the significant of the variable. Therefore, in this research the researcher used content validity to check the test both pre and post-test. The test in

form of written test. The validity is based on the standard competence and basic

competence from the government also helped by the English Teacher.

Table 6. Specification in Pre-Test and Post-Test Achievement on Writing Recount
Text of Eight Grade at SMA 45 Gresik

Standart competence	Basic competence	Test	
		Pre-test	**Post-test**
MENULIS 6.Mengungka pkan makna dalam teks tulis fungsional pendek dan esei sederhana berbentuk *recount, narrative,* dan *procedure* dalam konteks kehidupan sehari-hari	6.2.Mengung-kapkan makna dan langkah-langkah retorika secara akurat, lancar dan berterima dengan menggunak an ragam bahasa tulis dalam konteks kehidupan sehari-hari dalam teks berbentuk: *recount, narrative,* dan *procedure*	Please compose a recount text based on your experienced	Please compose a recount text based on your experienced

3.4.3. Reliability of the Test

According to Franken and Wallen (1990:154) reliability refers to the

consistency of the scores obtained how consistent they are for each individual

from one administration of an instrument to another and from one set of items to

another.

In this study, the writer used Inter-rater Reliability to find out the result

of the reliability test, because writing is concluded as subjective test. According to

Brown (2004:20), inter-rater reliability occurred when two or more scores yield inconsistent scores of the same test, possibly for lack of attention to scoring Criteria, inexperience, inattention, or even preconceived of biases. It was essentially a variation of the equivalent from type of reliability in that scores are usually produced by two raters. It can be conclude that inter-rater reliability is the degree of agreement between two raters. To find out the reliability of the test, it held try out test be given to sample students. the writer had done the tryout of written test instrument at SMA 45 Gresik at tenth grade students with the total of the students was 42 students as the sample for finding reliability of the test. The raters of students' writing recount text were Ms. Vita Dwi Susanti, S.Pd, Mrs. Mabrurotul Uyun, S.Pd who is the English teacher of tenth grade

3.5. Treatment

In this study the researcher give treatment. It is gave after posttest already delivered to the students. The treatment are given both to the experimental group and control group, but the treatment is different both of them.

3.5.1. Experimental group treatment

For experimental group, they are treated with the creative task as a strategy. The creative task will be used to teach writing recount text for experimental group. They will be provided with some game to aid them to write recount text. They have to finish the task game one by one and at the finish they have to write recount text based on the game's instruction.

3.5.2. Control group treatment

Control group will teach by using traditional teaching method for teaching recount text. They have to understand and comprehend the explanation and examples of recount text. It purposes to imitate the common teaching learning process in most school. the result of control group used by the researcher to conclude whether there is significant effect or not using creative task in teaching writing recount text.

3.6 Method of collecting Data

In this study the researcher uses sequences of steps to collect the data. It include pretest, treatment and post-test for both control group and experimental group.

3.6.1 Scoring and Grading pretest

Pre-test is conducted at the beginning of the study. It is purpose to measure the students' writing skill and it will be the starting point in determining the result and the effectiveness of this study. In the pre-test the students are ask to compose a recount text based on their experienced.

3.6.2 Scoring and Grading Posttest

After both experimental group and control group receive the treatment, they will receive the post test. The forms of the test will the same with the pre-test but different topic. It purposes s to measure and asses effectiveness of the application creative task strategy on students writing recount text.

Below the rubric scoring for pre-test and post-test to assess the students

writing recount text based on Brown (2004:244-245)

Table 7. Scoring Rubric Adapted From Brown (2004:244-245)

Aspect	Score	Scoring criteria
Organization	20-18	Appropriate tittle, effective introductory paragraph, arrangement of materials show plan, conclusion logical and complete
	17-15	Adequate tittle, introduction, and conclusion body developed.
	14-12	Mediocre introduction or conclusion problem, with the order of ideas in body, the generalization may not be fully supported
	11-6	Minimally recognizable introduction; organization can barely be seen; severe problems with ordering ideas
	5-1	Absence of introduction or conclusion; no apparent organization of the body; writer has not made any effort to organize the composition
Content	20-18	Essay addresses the assigned topics; the ideas are concrete and thoroughly developed; no extraneous materials
	17-15	Essay addresses the issues but missing some points; ideas could be more developed; some extraneous materials are present
	14-12	Development of ideas not complete; essay is divided exactly right
	11-6	Ideas incomplete; essay does not reflect careful thinking; inadequate effort in area of content
	5-1	Essay is completely inadequate; no apparent effort to consider the topic carefully
Grammar	20-18	Native-like fluency in English grammar; correct use of relative clauses, prepositions, modals, articles, verb forms, and tense sequencing; no fragments
	17-15	Advanced proficiency in English grammar; some communication; no fragments
	14-12	Grammar problems are apparent and have a negative effect on communication; fragments presents
	11-6	Numerous serious grammar problems interfere with communication ; grammar review of some areas clearly needed; difficult to read sentences

	5-1	Reader can't understand what the writer was trying to say; unintelligible sentence structure
Mechanics	20-18	Correct use of English writing conventions; all needed capitals, paragraph indented, punctuation and spelling; very neat
	17-15	Some problems with writing conventions or punctuation, occasional spelling errors; paper is neat and legible
	14-12	General writing conventions but has errors; spelling problems distract readers; punctuation errors distract ideas
	11-6	Serious problems with format or paper; errors in sentence punctuations; unacceptable to educated readers
	5-1	Complete disregards for English writing Conventions; obvious capitals missing.
Vocabulary	20-18	Precise vocabulary usage; use of parallel structure; good register
	17-15	Attempts variety; good vocabulary; not wordy
	14-12	Some vocabulary misused; lack awareness of register; too wordy
	11-6	Poor expression of ideas; problems in vocabulary; lacks variety of structure
	5-1	Inappropriate use of vocabulary; no concept of register or sentence variety

After delivering the pre-test and post- test, the researcher will grade the students score to divide and categorize the students based on it. The following is the students grading score based on the rubric.

Table 8. Grading Scale for Students' Mastery of Recount Text Writing

Score	Grade
100-86	A
85-71	B
70-61	C
60-51	D
50-0	E

3.7   Data Analysis

After collecting the data, the researcher will analyse the data. Analyzing the data is very important in a research because it answers the research problem which is taken from pre-test and post-test. The researcher analyses the data using SPSS program which is Independent sample t-test. Moreover, the samples are small and the groups are independent, t-test for independent samples is carried out to determine whether there is any significant between experimental and control group.

The assumption for Independent t-test where: (1) Independence: Observations within each sample must be independent, (2) Normal Distribution: The two population must be normally distributed. This study is included in parametric research which divides into two kinds of data; ratio and interval. The data of this study is ratio because zero has value or absolute zero. Ratio data is defining homogeny and normal distribution. The last, (3) Homogeneity of Variance: the two populations must have equal variance.

3.7.1   Homogeneity Test of Variance

For homogeneity test, the researcher used one Levene's test of homogeneity test in SPSS 15.0 version. The purpose of this test was to analysis the variances of the observation in Control Group and Experimental Group were equal. Because the researcher could not random the students, so homogeneity test was necessary to make sure the students in both of the class had the same ability in writing or not and the researcher could conduct the treatment. The test of Levene's test, or P, defined as follow:

$$W = \frac{(N - k)}{(k - 1)} \frac{\sum_{i}^{k} = 1 \, N_i \, (Z_i - Z)^2}{\sum_{i}^{k} = 1 \sum_{j}^{N_i} = 1 \, (Z_{ij} - Z_i)^2}$$

The symbols defined as follow:

W   : the result of the test

K   : the number of different groups which the sample belong

N   : the total number of sample in all groups

N_i : the number of sample in i group

Y_{ij} : the value of the sample from the jth case from i[th] group

$$Z_{ij} = \begin{cases} \left| Y_{ij} - \bar{Y}_i \right| \bar{Y}_i \\ \left| Y_{ij} - \bar{Y}_i \right| \bar{Y}_i \end{cases} \begin{array}{l} \text{is a mean of i}^{\text{th}} \text{ group} \\ \text{is a median of i}^{\text{th}} \text{ group} \end{array}$$

The significance of P is tasted a gained F (α,k – 1, N – k) where F is a quintile of the test distribution, with k – 1 and N – k its degrees of freedom, and α is the chosen level of significance (0.05). To analyse the homogeneity, the researcher uses SPSS 16.0. The homogeneity will be checked in SPSS by Levene's test with the following procedure. The first step is inserting the pre-test score of both groups using data view. The second is going to the analyse menu, selecting compare means and the choosing independent sample t-test. The last procedure is interpreting the homogeneity test output, the researcher looks (sig.) at the Levene's test columns to know whether the quality of variance in group of scores was homogeneity or not. If the sig. > α (0.05), two populations of variance were homogenous or equal but if sig. < α (0.05) two populations of variance were not homogenous or not equal.

3.7.2 Independent T-test

Independent t-test is used to find out the significant difference of using creative task strategy for increasing student's writing ability between experimental and control group. The steps of t-test calculation are: First, test the hypothesis of the research and the setting α (alpha) level at 0.05 (two-tailed test). The hypothesis in this research could be formulated as follow:

H_0 : There is no significant difference of using creative task strategy on Student's Writing ability between Experimental and control group.

H_1 : There is significant difference of using creative task strategy on Student's Writing ability between Experimental and control group.

The second step is finding t-value using Independent - Sample T-Test and comparing the probability with the level of significance for testing the hypothesis. After the scores computed in SPSS 16.00 version, then to see the output of Independent- Sample T-Test and interpret the output that if sig. (2-tailed) > α (0.05), the researcher should accept the H0, but if sig. (2-tailed) < α (0.05), the researcher can be rejected the H0, it means H1 is accepted.

T-test calculates to find out the comparison of two means between pre and post test score of experimental and control group. In analyzing the data, the researcher uses independent t-test formula to analyse the data. The formula for calculating t-test is :

$$t = \frac{(x_1 - x_2) - (\mu_1 - \mu_2)}{Sx_1 - x_2}$$

Where :

t : t value

x_1 : Average group 1

x_2 : Average group 2

S : Standard error of two groups

$\mu_1 - \mu_2$: Always a default to 0

      Pooled variance: the average of two-sample variance, allowing the large sample to weight more heavily:

Formula:

$$S_{x_1-x_2} = \sqrt{\frac{S^2 pooled}{n_1} + \frac{S^2 pooled}{n_2}}$$

Where :

$S_{x_1-x_2}$: Standard error of two groups

$S^2 pooled$: Variants of two groups

n_1 : Number of sample group 1

n_2 : Number of sample group 2

Standard Error of the differences

$$S_{x_1-x_2} = \sqrt{\left(\frac{S^2 pooled}{n_1}\right)\left(\frac{S^2 pooled}{n_1}\right)}$$

      In calculating t-test, the researcher uses SPSS 16.00 version. The first steps, input the data of post-test in SPSS program between experimental and control group, then click Analyze then Compare Mean then Independent Sample T-Test. In Independent Sample T- Test, input the score variable into Test Variable column, and group variable Grouping Variable column, then clicks Define Group, Choose group 1 (for experimental) and group 2 (for control), then click OK.