

CHAPTER III

RESEARCH METHOD

This chapter is divided into seven sub sections. They are: (1) research design, (2) variables, (3) population and sample, (4) instrument, (5) treatment, (6) data collection, and (7) data analysis.

A. Research Design

This research used experimental research design. According to Creswell (2003), experimental research is most appropriate for answering a research question about the effect of a treatment. The essential feature of experimental research is that investigators deliberately control and manipulate the conditions which determine the events, in which they are interested, introduce an intervention and measure the differences that it makes. An experiment involves making a change in the value of one variable – called the independent variable and observing the effect of that change on another variable – called the dependent variable (Louis, 2007:291).

To investigate the effectiveness of Photographs on Instagram in teaching writing and to enhance students' writing in descriptive text the researcher use one of the type of experimental research design that is quasi experimental design. Furthermore, conforming to why using quasi experimental research because there is no visible to have random assignment to determine the sample of the research. In this case the teacher/school only provided one class for the researcher to

conduct this study. It means that, the researcher does not have an authority to choose the sample. In the one group pre-test and post-test design, a single group was measured or observed. The requirement of this design is stated by Donald (2010: 302), quasi experimental design does not have random assignment of subject to groups or other strategies to control extraneous variable.

In this case the independent variable is the use of Photographs on Instagram and the dependent variable is students' achievement in descriptive text, independent variable influences the dependent variable. To know the result whether the dependent is influenced well positively, the researcher use pre-test and post-test to measure that. The design of the research can be summarized as follows:

This study used “quasi experiment” because it does not have randomly assigned groups. The design of the experiment can be described as follows :

Table 3.1.
Design of the Experiment

E	01	X	02
C	03	Y	04

(Arikunto, 2002:79)

In which:

E: Experimental group,

C: Control Group,

01: Pre-test for the experimental group,

02: Post-test for the experimental group,

03: Pre-test for the control group,

04: Post-test for the control group,

X: Treatment with Photographs on Instagram, and

Y: Treatment by using printed picture

In the design above, subjects were assigned to the experimental group (top line) and the control group (bottom line). The quality of the subjects was first checked by pre-testing them (01 and 03), and then the experimental treatment was performed to the experimental group, while the control group was taught descriptive text texts without Photographs on Instagram. The test was an essay. The results of which (02 and 04) were then computed statistically.

B. Variables

According to Saleh (2004: 8), a variable is essentially what we can observe or quantify of the human characteristics or abilities involved. There were two types of variables: dependent variable and independent variable. The dependent variable, as Saleh (2004: 10), is observed to determine what effect, if any, the other types of variables may have on it. In other words, it is the variable of focus – the central variable – on which other variables will act if there is any relationship. And independent variable according to Saleh (2004: 10), is variable selected by the researcher to determine their effect on or relationship with the dependent variable.

So the variables in this research were:

1. The independent variable that was method in writing descriptive text through a Photographs on Instagram.
2. The dependent variable is the students achievement manifested in the test score.

C. Population and Sample

Brown (2001: 71) states that a population is the entire group of people who are of interest in a particular survey. While according to Saleh (2004: 227) population is a group about which the researcher is interested in gaining information and drawing conclusions. To make the study more feasible, it was important for the writer to know the research area where the research was conducted. This research was conducted in the first grade of SMAN 7 Kediri. This research was intended for first grade of SMAN 7 Kediri in academic year 2021-2022.

As stated before, the writer chose the first grade students of SMAN 7 Kediri in the academic year of 2021/2022 as the population of this research based on some reasons, those were:

1. Both groups of students are in the same year.
2. Both groups of student are of the same study program (science).
3. The students have been studying English for the same period of time.

In order to study a population more effectively, the writer selected a sample. Brown (2001: 71) states that a sample is a subgroup of the students that is representative of the whole population. While according to Saleh (2004: 33) a sample is a group of people, thing or place where data is collected. A sample is actually a part, which is considered as a representative of a population.

The writer selected two classes of the students from the population as sample in this study. In order to get the representative sample, the writer choose the sample that could represent the true situation of the population. They were

experimental group taught using Photographs on Instagram and control group by using conventional teaching.

D. Instrument

Any scientific study needs essential instruments to gather the required data. The selection and construction of appropriate, valid and reliable research instrument are very essential step a scientific investigation. Instrument is a means for gathering data and any equipment used to collect data (Arikunto, 2010:262). As an experimental research, the instrument used in this research was writing test. According to Ary et al (2006:201) test is a set of stimuli presented to individual in order to elicit responses on the basis of which a numerical score can be assigned.

Instrument is an important device for collecting the data in a research study. To measure the students' achievement in education, for example, usually a test is used as the instrument. From a certain kind of test, a teacher or an experimenter will be able to collect the data that is the scores which can be used to identify, classify, or evaluate the test takers.

In this research, one instrument is used to get the data. This is a written test. The written test is important to answer the research question about how well does Photographs on Instagram contribute to the students' skills in writing descriptive text. The test will be given twice: pre-test and post test, both of them are in the form of essay

1. Pre-test

Pre-test is a test which is given before the researcher gives treatment to the students. Pre-test is conducted to measure students writing skill before

treatment. Giving pre-test is important, because this is to know the initial students' ability in writing.

2. Post-test

Post-test was given to all of the groups, the experimental and the control groups. Post-test was conducted to measure students' writing skill after getting treatment. The material of post-test is based on the material that given in the treatment. This test is aimed to know about the progression of both experimental and control groups.

There were two kinds of test in this study, those were pre-test and post- test. Pre-test was intended to measure students' writing achievement in descriptive text before the treatment given. While, post-test was to measure students' writing achievement in descriptive text after treatment given. The tests were in the form of subject test is writing descriptive text to measure students' writing achievement in descriptive text about tourism place. Both of the tests have different on the tourism place but they have similarity on the type of descriptive text.

Furthermore, the writer gave score to the students' writing by using scoring guide of writing according to Cohen (1994:328-329) in the following below:

Table 3.2
Scoring Guide of Writing

Aspects	Scores	Indicators
Content	5 (Excellent)	Main ideas, started clearly and accurately, change of opinion very clear
	4 (Good)	Main ideas stated fairly clearly and accurately, change of opinion relatively clear
	3 (Average)	Main ideas somewhat unclear and inaccurate, change of opinion somewhat weak
	2 (Poor)	Main ideas not clear or accurate, change of opinion week

	1 (very Poor)	Main ideas not all clear or accurate, change of opinion very weak
Organization	5 (Excellent)	Well organized and perfectly coherent
	4 (Good)	Fairly well organized and generally coherent
	3 (Average)	Loosely organized but main ideas clear, logical but incomplete sequencing
	2 (Poor)	Ideas disconnected, lacks logical sequencing
	1 (Very Poor)	No organization, incoherent
vocabulary	5 (Excellent)	Very effective choice of words and use of idioms and word forms
	4 (Good)	Effective choice of word and use of idioms and word forms
	3 (Average)	Adequate choice of words but some misuse of vocabulary, idioms and word forms
	2 (Poor)	Limited range, confused use of words, idioms and word forms
	1 (Very poor)	Very limited range, very poor knowledge of words, idioms and word forms
Grammar	5 (Excellent)	No errors, full control of complex structure
	4 (Good)	Almost no error, good control of structure
	3 (Average)	Some errors, fair control of structure
	2 (Poor)	Many errors, poor control of structure
	1 (Very Poor)	Dominated by errors, no control of structure
Mechanics	5 (Excellent)	Mastery of spelling and punctuation
	4 (Good)	Few errors in spelling and punctuation
	3 (Average)	Fair number of spelling and punctuation errors
	2 (Poor)	Frequent errors in spelling and punctuation
	1 (Very Poor)	No control over spelling and punctuation

Score:

$$\frac{\text{The total number gotten}}{\text{The maximal score}} \times 100 = N$$

E. Treatment

1. Procedure of the Experiment

The procedure of experiment was as follows:

- a. Choosing the first grade students of SMAN 7 Kediri as the population.
- b. Taking two groups of the students as the samples, one as the experimental group and the other as the control group.

- c. After that, conducting real experiment.

Before conducting the treatment, the writer conducted pretest. After that, the writer directly conducted the treatment. The writer gave 6 times treatment for experimental group and control group. The treatment were guessing a picture and expressing opinions, identify a topic and the purpose of text, analyzing the generic structure and language feature of text, arranging sentences of descriptive text, exercising modality, and exercising simple present tense. Both groups were taught the same topic but different in the technique of teaching. The experimental group was taught using Photographs on Instagram, and the control group by using conventional teaching.

2. The Activities of the Experimental Group

a. Pretest

The pretest was given before doing the experiment. First, I came to the chosen class and then I conducted the test by myself to the class and explained to the students about what they were going to do. I distributed the instruments and asked them to do the pretest individually. The tests were in the form of subject test is writing descriptive text to measure students' writing achievement in descriptive text about tourism place.

b. Activities in the experimental group

In conducting the experiment, the students were given descriptive text texts. The experimental class used a Photographs on Instagram as the learning media.

c. Post-test

A post-test was given after conducting all the activities above. The test given to the students was the same as pretest.

3. The Activities of the Control Group

a. Pretest

The pretest was given before doing the experiment. First, I came to the chosen class and then I conducted the test by myself to the class and explained to the students about what they were going to do. I distributed the instruments and asked them to do the pretest individually. The tests were in the form of subject test is writing descriptive text to measure students' writing achievement in descriptive text about tourism place.

b. Activities in the experiment

In conducting the experiment, the students were given descriptive text texts. In the control class the students were given verbal a guidance. Printed picture used in this group.

c. Post-test

Post-test was given after conducting all the activities above. The test given to the students was the same as pretest.

Table 3.3
List of Activities of the Experimental Group and Control Group

No	Experimental group	Control group	Materials	Time
1.	Pretest (Write descriptive text).	Pretest (Write descriptive text).	-	January 31,2022
2.	Guess a picture and expressing opinions by Photographs on Instagram.	Guess a picture and expressing opinions by using printed picture.	Descriptive text	February 1, 2022
3.	Identify a topic and the purpose of text by Photographs on Instagram.	Identify a topic and the purpose of text by using printed picture.	Descriptive text	February 7, 2022
4.	Analyze the generic structure and language feature of text by Photographs on Instagram.	Analyze the generic structure and language feature of text by using printed picture.	Descriptive text	February 8, 2022
5.	Exercise modality by Photographs on Instagram.	Exercising modality by using printed picture.	Modality	February 15, 2022
6.	Exercise Simple present tense by Photographs on Instagram.	Exercising Simple present tense by using printed picture.	Simple Present Tense	February 21, 2022
7.	Post-test (Write descriptive text).	Post test (Write descriptive text).	-	February 22, 2022

It is described in the activities in table 3.3 which were carried out in the experimental and control classes starting from observation, giving pre-test and post-test. The study started from January to February with a comparison of the treatment in the experimental class and the control class. The use of photograph on Instagram is given in each treatment to increase students' insight when viewing pictures, because what will be developed is writing skills. The provision of material in each treatment is the same and the difference is the media given.

F. Data Collection

The researcher used test to collect the data. This research use quantitative data taken from the students' writing score. The data are from pre-test and post test score.

The first data are pre-test. Pre-test are given to experimental and control group with same test. It is done to measure students' writing ability before getting treatment. The second data are post-test. This test is held after the groups get treatment. It is to know whether Photographs on Instagram technique is more effective in teaching writing especially descriptive text than the conventional technique.

In scoring writing test, it involves the subjectivity because the kind of test used in this study is written descriptive text test. Therefore, inter – rater reliability is used to find out whether a test is reliable.

The researcher chooses the English teacher of first grade of SMAN 7 Kediri as rater 1 and the researcher as rater 2. In correlating the score from two raters, the researcher uses Pearson Product Moment formula. In this case, Pearson Product Moment is done by using SPSS 21.

G. Data Analysis

The analysis in this research is quantitative. The researcher uses ANCOVA (Analysis of Covariance) to analyze the data, because in experimental designs to control for factors which cannot be randomized but which can be measured on an interval scale. The researcher wants to know the effectiveness of using

Photographs on Instagram strategy to teach students' descriptive writing skill of the first grade of SMAN 7 Kediri.

Analysis of Covariance (ANCOVA) was a procedure by which statistical were made to a dependent variable. This method increases the strength of a quasi-experimental design. The last step in analysing the data was testing the hypothesis of research. From the analysis above, the criteria to test the hypothesis of this research which is use in SPSS were:

1. If sig.value <0.05 , the null hypothesis (H_0) is rejected, while the alternative hypothesis (H_a) isaccepted
2. If sig.value >0.05 , the null hypothesis (H_0) is accepted, while the alternative hypothesis (H_a) isrejected.