CHAPTER III

RESEARCH METHOD

This chapter presents about the research method used in the study which covers: (a) research design, (b) population, sample and sampling, (c) variables of the study, (d) research instrument, (e) treatments, (f) validity and reliability testing, (g) normality and homogeneity testing, (h) data collecting method, (i) data analysis, and then (j) hypothesis testing.

A. Research Design

In this study, the researcher used experimental research with quantitative approach. Experimental research is a powerful research method to establish cause and effect relationship. Ary et al (2007: 338) states "Experimental research design is a scientific investigation in which the researcher manipulates one or more independent variables, controls any other relevant variables, and observes the effect of a manipulation on the dependent variable".

The experimental research design is classified into: pre-experimental design, true experimental design and quasi experimental design. Pre experimental designs do not have random assignment of subjects to groups or other strategies to control extraneous variables. True experimental designs used randomization and provide maximum control of extraneous variables.

In this study, the researcher used quasi experimental design with nonrandomized control group, pre-test and post-test design. This research involved two groups of subject; they were experimental class and control class. In teaching speaking, the experimental class was taught by using video blog (vlog) and the control class was taught without using video blog (vlog). In other word, the control class was taught by using a conventional method. The two groups were measured not only after being exposed to a treatment of some sort but also before being given treatments. So, the researcher gave pre-test and post-test to measure the different attained scores in speaking. The design of the study was taken from Ary (2006) and presented in the table 3.1below:

Table 3.1 The design of nonrandomized control group, pre-test and post-test design:

Group	Pre-test	Treatment	Post-test
A	Y1	X	Y2
B	Y1	-	Y2

(Taken from Ary, 2006)

Notes:

A : Experimental group

B : Control group

Y1 : Pre-test in experimental group before treatment

Y1 : Pre-test in control group

Y2 : Post-test in experimental group after treatment

Y2 : Post-test in control group

X   : Treatment using video blog (vlog) for the experimental group

-           : The group without treatment or using conventional strategy

Based on the design above, the procedures of experimental research used randomized control group, pre-test and post-test design were:

1. Administering a pretest with a purpose of measuring speaking achievement of the eight grade students of VIII-A and VIII-B classes at MTsN 4 Tulungagung before being taught by using video blog (vlog) and conventional strategy.

2. Applying the experimental treatment in teaching speaking by using video blog (vlog) to the eight grade students of VIII-A at MTsN 4 Tulungagung and applying conventional strategy of teaching speaking to VIII-B class.

3. Administering a post-test with a purpose of measuring speaking achievement of the eight grade students of VIII-A classes MTsN 4 Tulungagung after being taught by using video blog (vlog) and conventional strategy.

Different attribute to the application of the experimental treatment was determined by comparing the pre-test and post-test scores. In this study, the researcher wanted to know the effectiveness of using video blog (vlog) toward students' speaking achievement by conducting an experimental research and providing a specific treatment. The effectiveness would be known after knowing the significant differences scores on speaking between the students' taught by using video blog (vlog) and those taught without using video blog (vlog).

B. Population, Sampling, and Sample

1. Population

A population is defined as all members of any well-defined class of people, events, or object (Ary et al, 2002: 163). In other words, we can define that population is a group or subject (persons or things) to whom or which the findings of the study are to be applied. The population in this research was the all of students' at eight grade of MTsN 4 Tulungagung that consisted of 351 students'. They were divided into nine classrooms. Class A, B, C, D, E, F, G, H, I, J. They distribution of the classes can be seen in the table 3.2 below:

Table 3.2 Population of Research

No	Class	Students' Number
1.	VIII A	30
2.	VIII B	34
3.	VIII C	37
4.	VIII D	34
5.	VIII E	34
6.	VIII F	39
7.	VIII G	39
8.	VIII H	37
9.	VIII I	36
10.	VIII J	31
	Total	**351**

2. Sampling

According to Gay (1992:123) sampling is the process of selecting a number of individuals for a study in such a way that the individuals represent the larger group from which they were selected. Sampling is also as a way to obtain sample as a part of population. In this research, the researcher used purposive sampling technique. Ary (2002: 163) states "the purpose of sampling is to obtain information concerning the population". The researcher used purposive sampling to take sample from population and it represents the entire population. Ary (2002: 169) states "purposive sampling also referred to as judgment sampling-sample elements judges to be typical, or representative, are chosen from the population."

3. Sample

According to Gay (1992: 123) sample is the individual selected comprise. Selection of the sample is a very important step in conducting a research study. Regardless of the specific technique used, the steps in sampling include identification of the population, determination of required sample size and selection of sample.

Based on the set consideration, they were two classes as the sample of the study. They were VIII-A class consisted of 30 students as the experimental class and VIII-B class consisted of 34 students as the control group. So, the total sample was 64 students'.

C. Variables of the study

A variable is a construct or characteristic that can take on different values and scores. Variables can be classified in several ways. According to Ary (2006: 40), the most important classification is on the basis of their use within the researcher under consideration when they are classified as independent (X) and dependent (Y) variables.

1. Independent variable

Independent variable is an attribute or characteristics that influences or affects an outcome (Creswell, 2008: 127). In this study the independent variable was using video blog (vlog) for the eighth grade students of MTsN 4 Tulungagung.

In this research I used 3 videos to support the learning process, one of them is about the aspect of descriptive text, we can learn the video from this link (https://youtu.be/XhllgAfTH3c). In this video we can learn how to pronounce with the facial expression, beside that we can learn about the aspects in descriptive text and also the example.

2. Dependent variable

Dependent variable is an attribute or characteristics that is dependent on, or influenced by the independent variable (Creswell, 2008: 127). In this study the dependent variable was the students' speaking skill of descriptive text.

D. **Research Instrument**

Research instrument is the measurement tools used by researcher while collecting data. Arikunto (2010: 262) stated study instrument referred to equipment used to collect the data. As an experimental study, the researcher used test in collecting required data. According to Ary et al (2010: 201) test was a asset of numerical score can be assigned.

Instrument which used by researcher was oral test. There were two kinds of tests for this study, those were pre-test and post-test. Pre-test was intended to measure students' score in speaking descriptive text before the treatment was given, while post-test was to measure student' score in speaking descriptive text after the treatment was given.

To assess of students' speaking ability the researcher set up analytic scoring rubric which include the criteria such as (1) content, (2) grammar, (3) fluency, (4) vocabulary. The score of the students' performance in speaking the following scoring rubric was used as follows:

Table. 3.3 Scoring Speaking Descriptive Text Rubric

The table of scoring adapted from (Brown: 2003) will be show as follow:

SCORING RUBRIC FOR SPEAKING

ASPECT		PERFORMANCE DESCRIPTION
CONTENT **(35)**	**1.Need Improvement (1-8)**	The content isn't appropriate with the topic
	2.Good (9-17)	The content less appropriate

		with the topic
	3.Very Good (18-25)	The content is almost appropriate with the topic
	4.Excellent (26-35)	The content is appropriate with the topic
GRAMMAR**(25)**	**1.Need Improvement****(1-9)**	A lot of mistakes in grammar, so it's become so hard to understand
	2.Good (10-14)	There are often grammar mistake that block the meaning and often re arrange sentence
	3.Very Good (15-19)	Sometimes do several mistakes, but it doesn't influence the meaning
	4.Excellent (20-25)	Almost there is mistake in grammar, it is easy to understand
FLUENCY**(25)**	**1.Need Improvement****(1-9)**	Speaks in single word utterances and short paterns
	2.Good (10-14)	Speak hesitantly because of rephrasing and searching for words
	3.Very Good (15-19)	Speak with occasional hesitation

	4.Excellent (20-25)	Speak fluently, any hesitations do not interfere with communication
VOCABULARY (15)	**1.Need Improvement (1-3)**	Uses less vocabulary and it's not express anything
	2.Good (4-7)	Use limited vocabulary
	3.Very Good (8-11)	Uses adequate vocabulary; some word usage irregularities
	4.Excellent (12-15)	Uses varied vocabulary

E. Treatments

Treatment is the step that must be conducted well and specific in experimental study. The purpose of treatment in this study is to help the students easier to speak especially about descriptive text. Here the students were guided to speak about descriptive text. Moreover, the treatment given in the study was in the form of video blog (vlog). The example of the material descriptive text is about people, animal, and place. Video blog (vlog) can help the students easier to speak English. The students can hear and learn how to speak the vocabulary from the video with the instruction from the teacher. It makes the students were enthusiasm, enjoyable and interested in learning English. When teaching and learning process by using video blog (vlog)

especially in descriptive text is done, the students were very happy and they got new spirit to learn or speak English.

The treatments in this study were conducted three times on 19th February 2020, 21th February 2020, and 26th February 2020. In detail, the teaching procedures of speaking descriptive text by using video blog (vlog) were applied by the researcher for students of eight grade at MTsN 4 Tulungagung could be elaborated on the table 3.4.

Table 3.4 The Procedure of Giving Treatments

The procedure of giving this treatment was based the researcher. Then, the procedure in teaching students' speaking skill through video vlog (blog) as teaching media as following:

Date	Activities
19th February 2020	1. The researcher gives stimulation for the students with some questions related with the topic. 2. The researcher explains what the correlation between the question and the material that will be studied about descriptive text. 3. The researcher shows the example of descriptive text in form of video. 4. Then, the researcher and the students identify the purpose of descriptive text, generic structure, and language features of descriptive text that was given in the video. 5. The researcher asks some of students to practice the text in front of the class.
21st February 2020	1. The researcher show the example in form of video

	2. The researcher asks to the students to write about adjective word and they must learn how to pronounce with the other friends.
	3. Then, the researcher asks some students to practice in front of the class and the other friends must repeat what them friend says in front of the class.
	4. The researcher gives some feedback about what they says before.
26th February 2020	1. The researcher instruct the students to make a descriptive text with the topic that have been determined
	2. Then, they must practice about the text in front of the class one by one
	3. The researcher give the feedback about their pronunciation and other

F.   Validity and Reliability Testing

1. Validity

Validity is the degree to which a test measure what it is supposed to measure. Brown (2003: 22) explained that validity is the most complex criterion of an effective test and the most important principle of language testing. According to Gronlund (1998) as quoted in Brown (2003:22) stated that validity is the extent to which inferences made from assessment results are appropriate, meaningful, and useful in terms of the purpose of the assessment. Thus, a valid test should measure what the researcher wanted to measure.

In this research, the researcher considered the face validity, content validity and construct validity for the test as the instrument of research.

a. **Face Validity**

Face validity refers to the degree to which a test looks right, and appears to measure the knowledge or abilities it claims to measure, based on subjective judgment or the examines who take it, the administrative personnel who decide on its use, and other psychometrically unsophisticated observers (Brown, 2004). The test in this study was designed to measure students' speaking skill.

There are some aspects that were considered from this test to make a good test based on the validity.

a. The instruction must be clear for students. It was about what they should do in the test.

b. In this test, students of eight grades at Junior High School were instructed to speak descriptive text. Thus, the degree of the test must be suitable for their level.

c. The consideration of time allocation must be clearly. The researcher gave time to speak about 3-5 minutes for each student.

b. Content Validity

Content validity is a kind of validity which depends on careful analysis of the language being tested and a particular test. Hughes (2003: 26) stated that test is considered to have content validity if their content constitutes a representative sample of language skills, structures, etc. it meant to be concerned according to Mousavi (2002) as cited by Brown (2003: 22) explained that a test is valid if it requires the students to perform the behavior that is being measured.

The most proper role for achieving the content validity for the speaking test was to test the students' speaking performance directly. The researcher also looked at the syllabus when constructing the test and the test was suitable to the syllabus of English for junior high school in the competence of speaking. Content validity was shown in the table 3.5:

Table 3.5 English syllabus of descriptive text for 8th grade at Junior High School

Core Competence	Basic Competence	Indicator
KI 4: Mengolah, menalar, dan menyaji dlam ranah konkret dan ranah abstrak terkait dengan pengembangan dari yang dipelajarinya di sekolah secara mandiri, dan mampu menggunakan metode sesuai kaidah.	4.12 Menyusun teks deskriptif lisan dan tulis pendek dan sederhana, tentang orang, binatang, dan benda, dengan memperhatikan fungsi sosial, struktur teks dan unsure kebahasaan yang benar dan sesuai konteks.	4.12.1 Menyusun teks deskriptif lisan tentang orang, binatang maupun benda dengan memperhatikan unsur kebahasaan 4.12.2 Menyusun teks deskriptif tulis tentang orang, binatang maupun benda dengan memperhatikan unsur kebahasaan.

c. **Construct Validity**

Brown (2003: 25) explained that "construct is any theory, hypothesis, or model that attempts to explain observed phenomena in our universe of perception". In term of construct validity, the test is considered to have construct validity if it can be demonstrated that it measures just the ability which is hypothesized in a theory of language ability. Both in the pre-test and post-test, the researcher gave speaking test thought oral test. The test was considered to have construct validity for the purpose of testing proficiency in speaking skill.

2. **Reliability**

Reliability (in testing) is a measure of the degree to which a test gives consistent result (Richard, 1992: 314). According to Ary (2002: 250) states that reliability is concerned with the effect of such random errors of measurement on the consistency of scores.

According to Heaton (1988: 162) reliability is a necessary characteristic of any good test: for it to be valid at all, a test must be reliable as a measuring instrument. In this test, the researcher used the inter-rater reliability, where the researcher involved two raters for scoring the students' speaking ability. Then, that two score is compared to know reliability of coefficient. The ideal value of reliability coefficient is 1. The test is called high correlation if the result calculation is quite to 1. If

the result is zero, it will be low correlation. According to Riduwan (2004:118), the criteria of reliability instrument can be divided into 5 classes as follows:

1. If the *alpha cronbach* score 0.00-0.20 : less reliable

2. If the *alpha cronbach* score 0.21-0.40 : rather reliable

3. If the *alpha cronbach* score 0.41-0.60 : enough reliable

4. If the *alpha cronbach* score 0.61-0.80 : reliable

5. If the *alpha cronbach* score 0.81-1.00 : very reliable

To measure that reliability of test item, the researcher firstly gained tryout to another subject of sample were used in this research. The researcher used SPSS 16.0 version using the formula Cronbach Alpha to know the reliability of test instruments.

Based on the try-out of instrument that has been done on 17th February 2020 at 8th grade class, the researcher could find the result of the reliability test. The researcher used SPSS program to calculate it and the result of the test could be seen as in the table 3.6:

Table 3.6 The Reliability Statistics

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.937	.937	2

The result of calculation shows the reliability coefficient is 0.937. The ideal reliability coefficient is 1, in this case the calculation is quite to 1 (0.937~ 1). From the above evidence, it was found the test is reliable because the value is 0.937, it is between (0.81-1.00: very reliable).

G. Normality and Homogeneity Testing

Before analyzing the significant difference score of the students before and after being taught by using video blog (vlog), the data should be normal distribution and homogenous. To measure whether the data computations were normal distribution and homogenous, the researcher conducted normality testing and homogeneity testing.

1. Normality Testing

Normality testing was intended to measure whether the distribution of test was in normal distribution or not. Normal here means if the data have normal distribution. The main reason of conducting normality testing in a study that it is necessary for the researcher to know that the population or data involved in the study in normal distribution.

In this study to measure the normality testing, the researcher used SPSS 16.0 One Sample Kolmogrov – Smirnov method by the value of significance (α) = 0,05. Basic decisions in making normality testing were as follows:

a. If the significance value > 0,05, the data had normal distribution.

b. If the significance value < 0,05, the data did not have normal distribution.

The result of normality testing in this study can be seen as in the table 3.7

Table 3.7. The Result of Normality Testing.

One-Sample Kolmogorov-Smirnov Test

		Pretest	Posttest
N		30	30
Normal Parameters[a]	Mean	71.63	82.03
	Std. Deviation	4.888	4.846
Most Extreme Differences	Absolute	.081	.118
	Positive	.075	.118
	Negative	-.081	-.114
Kolmogorov-Smirnov Z		.443	.645
Asymp. Sig. (2-tailed)		.990	.800

a. Test distribution is Normal.

According to the result of normality testing, it showed that the value of Asymp. Sig (2-tailed) in pre-test was 0,990 and post-test was 0,800. It was higher than 0,05. So, it can be interpreted that the data had normal distribution.

2. **Homogeneity**

Homogeneity testing was intended to know whether the variance of data was homogeneous or not. It was used to know the similarity of the two conditions of population. In this case to measure the homogeneity testing, the researcher analysed the sample by using SPSS 16.0 (ANNOVA). The value

of significance (α) was 0.05. Basic decisions making in homogeneity testing were as follows:

a. If the significance value > 0,05, the data distribution was homogeneous.

b. If the significance value < 0,05, the data distribution was not homogeneous be seen as in the tables.

In testing the homogeneity, the researcher used the data of students pre-test and post-test. Then, the result of homogeneity testing in this study can be seen as in the table 3.8.

Table 3.8. The Result of Homogeneity Testing

Test of Homogeneity of Variances			
Experimental			
Levene Statistic	df1	df2	Sig.
1.551	8	14	.226

H. Data Collecting Method

According to Cresswell (2012: 9) collecting data means identifying and selecting individuals for a study, obtaining their permission on the study and gathering the information by asking people questions or observing their behavior. In this research the data was collected through pre test and post test by giving the students oral test in form of speaking descriptive.

The data of this study were collected by giving the students oral test in form of speaking practice in descriptive text. In the oral test, the students should make a descriptive text. The student speaking ability were scored by

using a scoring rubric consisting of five elements: content, vocabulary, grammar, pronunciation and fluency.

In collecting data, they were two kinds of tests administered in this study; pre-test and post-test.

a. **Pretest**

A pre-test provides a measure on some attribute or characteristics that you assess for participant in an experimental before they receive treatment (Cresswell: 2003). The purpose of this test is to know the students ability before giving the treatments. In this study, type of test used in pre-test was subjective test that it was done in February 14th February 2020. In this test, the students were instructed to speak a descriptive text in front of the class and the topic of the test was favorite teacher in the school.

b. **Post-test**

A post-test was a measure on some attribute or characteristics that is assessed for participants in an experiment after a treatment (Cresswell, 2008: 301). Post-test was done after the students gave the treatment. The type of test was same with the pre-test but it has different topic. The post-test was done at February, 28th February 2020. In this test, the students were instructed to speak a descriptive text in front of the class and the topic of the test was a best friends.

I. Data Analysis

Data analysis is a review of a series of activities, grouping, systematization, interpretation and verification of data so that a phenomenon has social value, academic, and scientific (Tanzeh, 2009: 69). The data obtained from research result of students test that were analyzed quantitatively. Quantitative analysis was done using statistic which is called statistical analysis or inferential statistic. The quantitative data of this research in analyzed using statistical computation. The data of post-test of both experimental group and control group were analyzed statistically by using independent T-test. This technique was used to find the significant difference score on students' speaking skill after being taught using video blog (vlog). In this research, the researcher uses SPSS 16.0.

J. Hypothesis Testing

The hypothesis of this research was as follows:

a. If T-test was higher than T-table, the null hypothesis (Ho) was rejected. It meant that there was significant difference score in speaking of the 8th grade students taught by using video blog (vlog) and those taught by using a conventional strategy.

b. If T-test was smaller than T-table, the null hypothesis (Ho) was accepted. It meant that there was no significant difference score in speaking of the 8th grade students taught by using video blog (vlog) and those taught by using a conventional strategy.