CHAPTER III

RESEARCH METHOD

This chapter presents the research method. It discusses the method used in this study. It includes research design, population, sampling and sample, variable, data and source of data, data collecting method and instruments, validity and reliability and technique of data analysis.

A. Research Design

This study used quasi-experimental research design and two groups. In this research there is one class as an experimental treatment group, and one class as a control group. In control group the researcher taught them without short movie as media, but in experimental class the researcher taught them using short movie as media. This activity is to know the effectiveness of short movie as a media to teach speaking skill by comparing the average score of two classes.

This research used quasi-experimental study because the researcher does not have random assignment of subject but the researcher took two groups to be used for post-test to see the result the treatment.

Ary et al (2006:307) stated that the illustration of Randomized Subjects, Pretest–Posttest Control Group Design as the table below:

Group	Pretest	Independent Variable	Posttest
E	Y1	X	Y2
C	Y1		Y2

E is experimental class, the researcher choose two class to conduct a research they are experimental class and control class, experimental class is a class which get treatment. The treatment is taught by short movie as media after given by pre-test

C is Control class. Control class the researcher taught without using short movie as media.

Y1 is pre-test the researcher gives a test to students before give a treatment or before taught using short movie as media, administering a pretest with a purpose of knowing the speaking ability of second grade students of MAN1 Trenggalek.

X is experimental treatment, researcher taught student using short movie media. Applying the experimental treatment teaching speaking by using movie to the subjects of MAN1 Trenggalek

Y2 is post-test the researcher will gives a test to the students after gives a treatment or after taught using short movie as media, administering a posttest with a purpose of measuring the speaking ability of MAN1 Trenggalek.

The researcher wants to know the effectiveness of short movie media toward students' speaking skill by pre-test and post-test score between treatment class and control class, whether there is any differences or not.

B.   **Population, Sample and Sampling**

1.   Population

A sample in a research study is the group on which information is obtained. The larger group to which one hopes to apply the results is called the population. (Frankel et al. 2012:92).

Population is subject which used to conduct the research. For this research the population is all of students in senior high school at first grade in MAN 1 Trenggalek.

In this research the total populations were 389. Therefore, the researcher uses all of the 11th students as the population.

2.   Sample

Sample is a part of population. In this research, the researcher took two of population. This research using simple Purposive sampling, it is basic type of sampling. The principle of simple purposive sampling is that every object has the same probability of being chosen.

Based on the amount of population, the researcher takes two classes as sample. One class as a control class and one class as a experiment class. The researcher use MIA 2 as experiment class

which consist of 31 students and MIA 3 as control class which consist of 32 students.

3. Sampling

    Sampling is a small group observed according to Ary et al (2006:167). Sampling is a technique of taking sample that is gives the opportunity for every population to be chosen as sample. In this research, the researcher chooses the class which had homogeneity than other class. Homogeneity is the students have similar score when they get a test, especially in speaking. Although they have different score, the score difference is not too far.

C. Variable

Variable is a characteristic that can take on different value and scores. Variable can be some factors that are considered as the object of this study. Variable divided into two group, they are independent variable (x) and dependent variable (y).

Independent variables are those that the researcher chooses to study in order to assess their possible effect(s) on one or more other variables. An independent variable is presumed to affect (at least partly cause) or somehow inf uence at least one other variable. The variable that the independent variable is presumed to affect is called a dependent variable. In

commonsense terms, the dependent variable "depends on" what the independent variable does to it, how it affects it. (Frankel *et al.* 2012:80).

X or dependent variable must be treatment variable. In this research the dependent variable is using short movie as media.

Y or independent variable is variable which influences dependent variable. The dependent variable is a variable which is influenced by independent variable is speaking skill.

In this research there are two variables. The dependent variable is short movie as media and independent variable is students' speaking skill.

D.   Data Collecting Method

Data collecting method is the way of researcher to gets research data. Method of data is provided reality about some steps which are used in the process of collecting data.

Collecting the data can be one of the most enjoyable aspects of doing research, but unless you know what you are doing, it can lead to research of poor quality. The urge to get on with it must be tempered with a clear sense of what you want to achieve and skill in how to get the information you need. (Anderson, 1998: 172)

On February 21st 2018 researcher gives pre-test to control class XI MIA 3. The researcher gave some questions about extracurricular. On February 22th 2018 the researcher gave pre-test in class experiment XI MIA 2 to know their score before giving treatment.

On February 28th researcher gives treatment for control class but without giving short movie as media. On March 1th 2018 researcher is doing treatment in experiment class with media is short movie. The short movie is about some argument from people that can stimulate the student to build their thinking.

On March 14th the researcher gives post-test to control class and on March 15th the researcher gives post-test for experiment class. Then the researcher gives some question about the impact of social media.

In this research the researcher uses two kind of test they are pre-test and post-test. They are given before and after doing experimental research in treatment.

1.   **Pre-Test**

In this test the researcher uses pre-test before give treatment. The pre-test is given to the student of experimental group and control group as the first step in collecting data. The researcher conducts interview to the student one by one about their knowledge in a topic given. The purpose of pretest is to measure the students' ability in speaking, especially in argumentative speaking. Here the researcher uses topic "Extracurricular is important".

Pre-test questions:

a.   What is your opinion about extracurricular?

b.   What is the advantage and disadvantage of extracurricular?

c.   In your opinion, what is the impact of extracurricular for student?

2.   Treatment

Treatment is given to student after doing pre-test. The researcher uses short movie as media to deliver the material. Treatment will be given two times in experiment class and the movies are different. The purpose of this treatment is to know the effectiveness of short movie toward students' speaking skill. Therefore, treatment is the core of this research.

3.   Post-Test

Post-test is given to students after researcher conducts treatment using short movie as media. Post test is conducted to measure students' ability in speaking score between class being taught by using short movie as media and the one that is not being taught by using short movie as media. In addition it is done to know whether there is differences score between two classes.

In this research for pre-test and post-test the researcher, the researcher uses different topic. In pre-test researcher shows them a short movie with topic extracurricular and the topic for post-test is social media.

Post-test question:

    a. What is your opinion about social media?

    b. What is the negative and positive effect from social media?

    c. In your opinion what is the impact of social media for student?

E.   **Validity and Reliability Testing.**

1.   **Validity**

Validity is the most important idea to consider when preparing or selecting an instrument for use. More than anything else, researchers want the information they obtain through the use of an instrument to serve their purposes. (Frankel et al. 2012:147)

Validity is important to evaluate the instrument before doing the research. Is the instrument suitable to use or not. Validity also called with tool to measure the instrument.

According Ary et al (2006:225) Validity is the most important consideration in developing and evaluating measuring instruments.

In this research researcher using three type of validity, they are content validity, construct validity and face validity.

a.   Content validity,

Content-related validity evidence is especially important for achievement test. It is also a concern for other types of measuring instruments, such as personality and aptitude measures. (Ary et al. 2006:228).

The test can said to have validity if the content constitutes a representative sample of the language skill, structure and etc. and the test should relevant with the purpose of the test, it's mean that the content validity should refer to the "Kurikulum"

Standard Competence	Berkomunikasi secara interpersonal, transaksional dan fungsional tentang diri sendiri, keluarga, serta orang, binatang, dan benda, kongkrit dan imajinatif yang terdekat dengan kehidupan dan kegiatan peserta didik sehari-hari di rumah, sekolah, dan masyarakat, serta terkait dengan mata pelajaran lain dan dunia kerja;
Basic Competence	Menyusun teks interaksi transaksional, lisan dan tulis, pendek dan sederhana, yang melibatkan tindakan memberi dan meminta informasi terkait pendapat dan pikiran, dengan memperhatikan fungsi sosial, struktur teks, dan unsur kebahasaan yang benar dan sesuai konteks
Indicator	Siswa mampu berfikir dan mengungkapkan pendapatnya tentang topic yang diberikan.
Technique	Speaking test
Instrument of Test	1. Pre-test 2. Posttest Interview about students' idea for a same topic after showed the short movie which relevant with a topic given.
Time Allocation	90 Minutes

b. Construct validity

Construct validity is any theory, hypothesis, or model that attempts to explain observed phenomena in our universe of perception. In the 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. (Brown, 2004:25)

c. Face Validity

A test is said have validity if it measure what is supposed to be measure. Face validity is hardly scientific concept, yet it is very important a test which does not have face validity may not be accepted by test-takers, teachers, education authorities or employers (Brown 2005:26). There are some consideration uses in this study to have a good test based on the validity:

1) The instruction given to the students must be clear.

2) In this test the students asked to tell their opinion about topic that have given, this activity suited with syllabus and their level.

3) The allotment is set definitively. The researcher give 3 minutes for each student to tell their opinion.

2. Reliability Testing

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. (Frankel *et al.* 2012:154). The test can called reliable is the score of students is same when given same test, its mean that they are consistent.

Reliability is an essential characteristic of a good test. A reliable test is consistent and dependable. Gronlund in brown (2004:22).

In this tryout the researcher using inter rater reliability is where the researcher used two raters scoring speaking skill. The researcher analyzed the correlation between two score by tryout using Pearson Product Moment and to analyze the correlation the researcher uses SPSS 16.0 for windows.

Table 3.1 Reliability of Pre-test

		Score1	Score2
Score1	Pearson Correlation	1	.795[**]
	Sig. (2-tailed)		.006
	N	10	10
Score2	Pearson Correlation	.795[**]	1
	Sig. (2-tailed)	.006	
	N	10	10

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

Based on the computation of the Pearson Product Moment in pre-test of Try-out the value is 0.795, it is bigger than r table is 0,632 so we can conclude that the pre-test is reliable.

Table 3.2 Reliability of Post-test

		Score1	Score2
Score1	Pearson Correlation	1	.816[**]
	Sig. (2-tailed)		.004
	N	10	10
Score2	Pearson Correlation	.816[**]	1
	Sig. (2-tailed)	.004	
	N	10	10

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

Based on the computation of the Pearson Product Moment in post-test of Try-out the value is 0.816, it is bigger than r table is 0,632 so we can conclude that the post-test is reliable.

F. **Normality and Homogeneity Testing**

1. **Normality**

Normality testing is used to examine whether a data set is well-modeled by a normal distribution or not. In this research, normality test is done toward the result (students' score) of pretest and posttest in speaking skill

Table 3.3 One-sample Kolmogrov-Smirnov test

One-Sample Kolmogorov-Smirnov Test

		Pre_control	Post_control	Pre_Exp	Post_Exp
N		32	32	31	31
Normal Parameters[a]	Mean	48.3750	46.8750	51.3548	53.6774
	Std. Deviation	7.55944	7.61895	9.96510	10.05448
Most Extreme Differences	Absolute	.230	.152	.127	.183
	Positive	.128	.129	.127	.183
	Negative	-.230	-.152	-.110	-.116
Kolmogorov-Smirnov Z		1.302	.862	.707	1.018
Asymp. Sig. (2-tailed)		.067	.447	.699	.251
a. Test distribution is Normal.					

Based on the output of the table above, it was known the significant value are 0.67 for pre-test in control class, 0.447 for post-test in control class, 0.699 for pre-test in experiment class and 0.25 for post-test in experiment class. In here the significant value is >0.005, so the data of this research is normal.

2. **Homogeneity**

Homogeneity testing is used to know homogeneous or not the variance of the two sample from the same population

Table 3.4 Homogeneity of Pre-test

Test of Homogeneity of Variances

Pre_test

Levene Statistic	df1	df2	Sig.
3.118	1	61	.082

Based on the output of the table above, it was known that the significance value is 0.082. It is bigger than 0.05. It can be concludes that the data was homogeneous.

G. Research Instrument

Instrument is tool of researcher to achieve the accuracy data. In this research the researcher using test as an instrument to get the data. Test used to make a research data have high quality. Instrument used to collect data. The researcher using two tests they are pre-test and post-test in two classes they are control class and experiment class.

In assessing students' speaking skill the researcher used scoring rubric

Table 3.5 Scoring Rubric

No.	Element of Speaking	Weight	Score	Criteria
1.	Content	28%	1-7	The student has simple opinion but do not equivalent with topic that has been determined.
			8-14	The student has simple opinion which equivalent with topic that has been determined.
			15-21	The Ideas are reasonable
			22-28	Able to develop the opinion

				within the range of his experience.
2.	Grammar	24%	1-6	The student does not use a simple present tense and totally wrong
			7-13	Use a simple present tense but still many significant mistakes but listener still understood.
			14-20	Control grammar is good, using simple present tense without mistakes.
			21-24	Able to use language with sufficient structural accuracy.
3.	Vocabulary	20%	1-5	Use inadequate vocabulary and it's not express anything.
			6-10	Use sufficient vocabulary and not detail to express self opinion.
			11-15	Use varied vocabularies but less detail to express self opinion.
			16-20	Use varied and detail vocabularies to express self opinion.
4.	Fluency	12%	1-3	No Specific fluently description
			4-6	Speak in single word utterance, very slow and short pattern.
			7-9	Speak fluently with occasional hesitation.
			10-12	Speak fluently with only slight hesitations that do not interfere with communication
5.	Pronunciation	8%	1-2	Errors in pronunciation are frequent.
			3-4	Pronunciation frequently unintelligible.
			5-6	Some pronunciation is unclear and error but still can be understood.
			7-8	Pronunciation is clear and correct.
6.	Comprehension	8%	1-2	Cannot tell self opinion from given topic

				3-4	Can tell self opinion from given topic but there are many mistakes.
				5-6	Can tell self opinion from given topic but still little mistakes.
				7-8	Can tell self opinion from given topic without any mistakes.

H. Procedure of teaching speaking using short movie

After getting score from pre-test the researcher gives treatment using short movie. The procedure in giving treatment as followed:

1. Teaching and learning process held about 90 minutes.

2. The activities consist of 10 minutes introduction. 70 minutes is main activity and 10 minutes for closing.

3. For 10 minutes the teacher introducing herself and delivering her purpose of this activity. Here the teacher is researcher herself.

4. For 70 minutes is main activity. The beginning of activity the researcher asks some question to students about related material after that the teacher show a video relayed with pre-test about extracurricular and ask the students to write what are they get from this video. The video will play twice. After that the teacher asks the student to make a group, one group consist of 2 person or pair to pair. They are required to make a dialog about extracurricular and present in front of the class in the end of class.

5. For 10 minutes in the end of class the teacher gives some feedback about pronunciation, grammar and vocabulary

6. For second day of treatment the teacher does same with day one in treatment but with different topic. The topic is social media. Here after give different topic the teacher ask the student presenting their opinion about social media individually. It is for post-test.

I. Data Analysis

This research used quantitative data analysis technique to know the students achievement before and after being taught by short movie media.

Managing and analyzing quantitative data collected from the researcher. The researcher use quantitative data analysis by using statistical computation. The data collected (data result) was processed by comparing the data (pre-test and post-test) from two classes, they are treatment class and control class, to see whether there will be significant difference the class given by treatment and not given by treatment. To know the significant difference on the students' speaking achievement being taught by movie as media and not being taught by movie as media the researcher in this research uses paired sample T-test at SPSS 16.0 for windows