CHAPTER III

RESEARCH METHODOLOGY

This Chapter discusses the methodology of the study. It consists of research purpose of study, clarification of key terms, research site and participants, research design, data collection techniques, and data analysis.

3.1 Research Design

The proposed research used quasi experimental research method in order to meet the objectives of the research. The research started to find out the effect of using video to students' speaking ability in the seventh of junior school with the quasi experimental method, the two groups control class and experimental class.

This research was conducted based on quantative method. The method was held in quasi experimental research. During the experiment, this research used video treatment in experimental group in order to show the effect of using video to students' speaking ability in the seventh grade of junior school. There were two classes involved in this study, experimental class and control class. Both classes were tested by pre-test and post-test. Before giving the post-test, video procedural text was given to the experimental class as the treatment. Meanwhile, the students in the control groups in the first were taught without using a video . Fraenkel and wallen (1990, p. 232) explains that in the process of collecting data, the research takes two groups in which the first group is experimental class with some treatments, and the other is control group without any treatments. Afterwards, the data which were taken from experimental class and control class would be compared and analyzed to find out its significance

The experimental design in this reserach is described as follow :

Table 3.1

Research Design

Group	Pre-Test	Treatment	Post-Test
Experimental	O1	X	O2
Control	O3	-	O4

Notes :

X = the treatment for the true experiment

O1 = the observation of pre-test in the experimental class

O2 = the observation of post –test in the experimental class

O3 = the observation of pre-test in the control class

O4 = the observation of post-test in the control class

(Campbell and Stanley , 1963, as cited in Cohen and Manion, 1994, p. 169)

In this research, the independent variable was improving student's speaking ability score in reporting procedural text by using videos. This was the treatment or manipulated variable in order to assess their possible effects on one more other variables. The dependent variable was student's speaking scores. This was the variable that depends on what independent variable does to it (Fraenkel&Wallen, 1993, p. 32)

The research started with the null hypothesis, the two groups were considered similar in the beginning of the experiment.

Ho : $\mu 1 = \mu 2$

Ho : There is no significant difference in mean adjusment level between the experimental group who received the video as the media and control group who did not.

According to Coolidge (2000) the null hypothesis states that there is no difference in meant adjustment level between the class using video as treatment and class without using video in teaching learning process. So that the null hypothesis in this research is “there is no difference between the two groups, experimental and control classes, in acquiring speaking”.

Hypothesis was needed as the research foundation. Alternative hypothesis states that there is significant difference between the pretest and posttest scores (coolidge,2000). It means that the use of video can develop students’ speaking ability.

3.2 The Subject of the Research

The subject in the research included population and sample. Sugiyono (2008) defines population as a group of people or things involving their characteristics and qualities that become research subject.The participant of the research were students’ from junior high school in Bandung

Sugiyono (2008) also defines sample as a part of population which is provided by some processes for investigating the properties of population. The sample of the research was smaller than population. The researcher applied samples since it is hard to have access to all members of the population. Sukmadinata (2005, p. 252) states that a sample must be representative and large. Further, the process of selecting and determining the type and number of samples that was required for research is called sampling. In the research , purposive sampling is chosen. Fraenkel and Wallen (1990, p. 75) state that the researcher, in purposive sampling, used personal judgment to select a sample. In the research , the classification was made by the school. The sample of the research would need two classes of the seventh grade.Only one class as the experimental class consisting of 25 students that were given some treatments and one more class as control class consisting of 25 students that were given no treatment.

3.3 Data Collection

The data collection in this study included research instrument, data collection and data analysis. The material taught were the procedural text available for the seventh grades.

3.3.1 Pre Test and Post Test

Speaking test which aimed to measure students' speaking ability was used as the instrument of the research. This speaking test was used in pre test and post test and given to the experimental and the control class. The aim of pre test and post test was to discover the initial students' speaking ability, where post test was conducted to find out students' speaking ability after having treatments. The speaking test were in form of procedural text.

However, before applying the pre test and post test to the experimental and control class, the pilot test was tested to another class.

There were some points to be considered in formulating the items of the test. First was the relevance of the items to the purpose of the study. The second was the relevance of the items to the curriculum.

3.3.2 Treatment

Treatment was given to both of the classes used different media. In the experimental class, teacher used video as a media in teaching speaking, meanwhile control class teacher to teach without video.

3.3.3 Questionnaires

According to Arikunto (2006,p.151), questionnaire was written question used to gain information and responds from respondents in s one-way communication. Sugiyono (2008,p.142) add that questionnaire can be efficient instrument if the researcher knows the respondents well and understands what to be expected from the respondents.

Based on a way of responding questions, there are two kinds of questionnaire , open and closed questionnaire. An open questionnaire is a questionniare in which the respondent are given freedom to express their opinion without being given certain limitations (Arikunto, 2006, p.152). In line with Arikunto, Sudjana (1990, p.68) explains that an open questionnaire is a questionnaire where the respondents are not provided possible answers so that they answer freely the questions given.

In the research, a closed questionnaire was chosen. The questionnaire was intended at finding out the students' responses toward improving students' speaking ability in reporting procedural text by using videos. It consisted of 18 questions covering 5 aspects : students' difficulties, students' problems, student's languagge skills improvement, student's Encouragment, and the advantages of video.

3.4 Research Procedure

In the research, there were several procedures or steps in conducting the research. The procedures were organizing the teaching procedures, organizing the research instruments, conducting an observation, testing the instruments, administering pretest, conducting some treatments, administering posttest, giving the questionnaire, and analyzing the data.

3.4.1 Organizing Teaching Procedure

In the research, the researcher functioned as a teacher in both experimental and control class. Preparing the appropriate materials for teaching and learning process during the treatments for experimental group became the most important thing. Besides that, the researcher organized teaching procedures in experimental and control class.The last, organizing the research instruments was needed for both of experimental and control class.

In the experimental class, the teacher used video in teaching speaking as a media in teaching and learning activities, on the other hand, the control class used conventional speaking media in teaching and learning activities.

3.4.2 Conducting an Observation

Before conducting the research as the purposed school, it was necessary to administer an observation. The observation was done to get information about the background of the students and condition of the school, whether the required facilities were available at the school.

3.4.3 Testing the instruments

Before the instruments were used in the study, a pilot test was conducted to test the instruments. The pilot test was done in another class to investigate and get the validity and realiability of the instruments. The try-out test consisted of one questions related to the syllabus and materials that were being taught at the school. The test materials were adapted from internet and other sources. The pilot test was established in class V11-A of SMP Pasundan 6 Bandung on May,2016 before the experimental teaching began.

3.4.4 administering Pre-Test

Pre-test was administered before conducting treatments and given to both experimental and control class. The pre-test was done to find out whether the experimental and control class are significantly different. If both classes were not significantly different, they could be used as the sample of the research. In addition, the pre-test was done to investigates the value of normality of distribution and homogeneity of variance to determine if the study used a parametric or non parametric test, so that the research could be done with appropriate procedures.

3.4.5 conducting Treatments

In the research, experimental class was treated by using video which consisted of monologue in the video. The video provides related material based on curriculum and lesson plan. The videos were taken from youtube.com and researcher focused on taking video that contain how to make a cake. Nevertheless, control class was no treated by using videos as media in teaching speaking, this class was taught by using conventional method. A schedule of treatments was

arranged to make well-establish treatments. The following was the schedule of the treatments.

Table 3.2
Schedule of the treatment

No	Experimental group	
	Date	Material / theme
1	May,16th 2016	Pilot test
2	May, 18th 2016	Pretest : how to make cupcakes
3	May,19th 2016	1st treatment : how to make french fries
4	May, 23rd 2016	2nd treatment : How to make mango puding
5	May,24th 2016	3rd treatment : How to make ice cream
6	May, 30th 2016	4th treatment : how to make fruit ice
7	May, 31th 2016	Posttest Questionnaire

3.4.6 Administering post-test

After conducting some treatments, at the end of the experimental, post-test was administered. The post-test was given to both experimental and control class. It was done to verify the efectiveness of video in teaching speaking procedural text, whether the post-test scores of the experimental and control class were significantly different. If both classes' scores are significantly different, the scores of experimental class were higher than the scores of the control class, the video was effective in improving students' speaking comprehension.

3.4.7 Administering Questionnaire

After conducting the post-test, a set of questionnaire was given to find out the students' response toward the use video in learning speaking procedural text. It was given to students of the experimental class. It consisted of 18 questions covering 5 aspects: : students' difficulties, students' problems, student's languagge skills improvement, student's Encouragment, and the advantages of video.

3.5 Data Analysis

After collecting data from the sample, data analysis was conducted with some procedures. There were several procedures in analyzing the obtained data. They were:

3.5.1 Scoring Technique

Oral performance test was used to collect the data of students' speaking scores. The most important thing in speaking class was the students were able to communicate with other in oral form (Jepersen cited in Murcia,1979, p.83). To get students'speaking scores, a scoring paper was developed based on the scoring guides proposed by Georgiou & Pavlou (2003). The adopted scoring paper consisted of three important aspects which are fluency, pronunciation,and discourse management. The elaboration of the scoring paper is existed in table below.

Table 3.3

Speaking scoring paper

FOCUS	LEVEL	✓	SCORE	COMMENT
FLUENCY	Frequent and long pauses cause difficulties in communicating.		15	
	Communicates even though there are some long pauses.		20	
	Communicates effectively without long pauses.		30	
PRONUNCIATION	Pronunciation and/or inaccurate intonation makes comprehension difficult.		15	

	Acceptable,easily comprehensible pronunciation and intonation.		20	
	Very good pronunciation and intonation.		30	
DISCOURSE MANAGEMENT	Structure are correct and there are not connection from each structure.		20	
	Structure correct and there are not connection from each structure.		30	
	Structure correct and there are connection from each structure.		40	
Overall comments:				
Action suggested:				
Teacher's signature				

Adapted from: Georgiou & Pavlou,2003,*Assessing Young Learners*,China,Oxford University Press

3.5.2 Analyzing Data on the Pre-Test

The aims of the pere-test were both investigate the students' initial ability and to investigate the initial equivalence between the groups.

3.5.3 Normality of Distribution

Analysis of normality of distribution on pre-test was conducted to find out the scores of the experimental and control classes whether normality distributed or not. To analyze normality of distribution, kolmolgrov-smirnov formula was used

in SPSS 20 for windows. If the Asymp. Sig > level of significance (0,05), the scores on pre test was normally distributed.

3.5.4 Homogeneity of Variance

Analysis of homogeneity of variance on pre test was conducted to find out whether variance of the experiance of the experience and control clases was homogenous. To analyze homogeneity of variance, Levene Tesr formula in SPSS 20 for windows was used in SPSS 20 for windows. If the probability > the level of significance (0,05), mean that the experimental and control classes on pretest were significantly different.

3.5.5 Analyzing Data on the Post-Test

The aim of the post-test way to verify the effectivness of the treatments. The independent t-test was used to analyze the post test scores of the experimental and control class. Furthermore, Hatch and Farhady (1928,p.114) state three asumption underlying the t-test as follows :

The subjec underlying the t-test as follows :

- The subjectd is alloted to one group in experiment.
- The variances' scores are equal and normality distributed.
- The scores on the independent variable continunous.

  Accordingly, the normality distribution and variance homogeneity test were done before calculating the data using t-test formula.

3.5.6 Normality Distribution

Analysis of normality of distribution on post test was conducted to find out eheteher the scores of the experimental and control classes were normaly distributed. To analyze normality of distribution, Kolmolgrov-Smirnov formula was used in SPSS for windows. If the Asymp. Sig > level of significance (0,05), the scored on post test was normally distributed.

3.5.7 Homogeneity of Variance

Analysis of homogeneity of variance on post test was conducted to find out whether variance of the experimental and control classes was homogeneous. To analyze homogeneity of variance, Levene Test formula in SPSS 20 for windows was used in SPSS 20 for windows. If the probability > the level of significance (0,05), variance of the experimental and the control classes was homogeneous.

3.5.8 The Independent T-test on Posttest

Analysis of the independent t-test on posttest was conducted to find out whether there is significant difference between the posttest means the experimental and control classes. Independent sample test formula in SPSS 20 for windows was used. If the Asymp. Sig > level of significantly different.

3.5.9 Analyzing Data on the Experimental Class Scores

To investigate whether the difference the pre-test and post-test means of the experimental class was significant, or not the matched t-test in SPSS 20 for windows was used to analyze the pre-test and post-test scores. If the probability was more than or equal to the level of significance, there was no significance difference between the pre-test and post-test scores.

3.5.10 Analyzing Data on Questionnaire

The data obtained from questionnaire were analyzed and described using qualitative approach. The data were experimental students' response toward the use of the treatments. In addition, the percentage formula was uded in analyzing the questionnaire. The data were interpreted based on the frequency of students' answers.