

CHAPTER III

METHODOLOGY

This chapter discusses the research methodology, which deals with the formulation of problem, research method, research subject, research procedure, and data analysis.

A. Formulation of Problem

This study will mainly investigate the use of authentic materials in teaching descriptive text to improve student's speaking ability. Thus, the research problems are formulated into two following questions:

1. To what extent is the use of authentic materials in teaching descriptive text effective to improve students' speaking ability?
2. In what way do the students respond toward the use of authentic materials in teaching descriptive text?

B. Research Design

This study basically is aimed at finding out whether or not using authentic materials in teaching descriptive text is effective to improve student's speaking ability. The research method used in this study is quasi-experimental with the nonequivalent control group design.

According to Ruseffendi (1994), the quasi-experimental study with non-equivalent control group design consists of pretest, different treatments, and posttest which are conducted toward the sample. In this research, the sample

is divided into two groups: experimental and control group. The experimental group was taught speaking by using authentic materials in descriptive text. On the other hand, the control group was taught speaking without using authentic materials in descriptive text. Both experimental and control groups were given pretest before the treatment and posttest after the treatment to find out whether or not there is any difference between the experimental and control groups.

The research design used can be formulated in the following chart:

<u>EG</u>	<u>X_{1E}</u>	<u>T</u>	<u>X_{2E}</u>
CG	X _{1C}	0	X _{2C}

Description:

EG : Experimental Group

CG : Control Group

X_{1E} : pretest to assess the experimental group's speaking ability

X_{2E}: posttest to assess the experimental group's speaking ability

T : the treatment, i.e. using authentic materials in teaching descriptive text

0 : the conventional method

X_{1C} : pretest to assess the control group's speaking ability

X_{2C}: posttest to assess the control group's speaking ability

C. Research Subject

Population is the whole subject, while the sample is the number of subject of study which represents the population (Arikunto, 1993). The population of the study is all students at the tenth grade of senior high school in SMA PGRI Cicalengka and the sample is X 1 class and X 2 class. Actually, the X 1 class consists of 37 students and the X 2 class consists of 36 students, but some students were absent when the pretest was conducted. Therefore, 33 students were chosen as the experimental group and 33 students as the control group. The students in both classes have the same characteristics and the same level English proficiency.

D. Research Procedure

The research procedures in this study deals with the research instruments and the treatment, which will be elaborated in the following details:

1. Developing Research Instruments

a. Test

In this study, there are two kinds of test: pretest and posttest which were given to experimental and control groups.

1) Pretest

The pretest was given to find out the students' level of speaking ability before they were taught descriptive text by using authentic materials. The pretest was in a form of oral test. The researcher carried out this test with the assistance of the tenth grade English teacher at SMA PGRI Cicalengka. The researcher provided two

pictures. The first topic was about celebrity and the second topic was about tourism places. The students were called in pairs to the teacher's desk. Then the researcher ordered the students to choose one of the pictures available. They had to watch the picture carefully. Finally, the researcher asked the students to describe and explain the picture they have chosen orally.

2) Posttest

The posttest was given to find out the measurement of the students' speaking ability improvement by comparing it to the pretest one after both groups received different treatment. The procedure of posttest was the same with the pretest one.

The criteria of speaking scoring system proposed by Sapani (1990:12-16) was used to assess the result of the student's score. The criteria are as follows:

Table 3.1

a. Grammar

Score	Criteria
5	Commits few errors in standard English grammar/usage and mechanics.
4	Commits some errors in standard English grammar/usage and mechanics that do not impede meaning; indicates basic understanding of conventions
3	Contains flaws in Standard English rules of grammar/usage and mechanics that do not impede meaning; indicates some

	consistent misunderstanding of the conventions
2	Displays consistent violations in Standard English rules of grammar/usage and mechanics that impede understanding
1	Overwhelm the listener with serious violations of Standard English rules grammar/usage and mechanics

b. Pronunciation

Score	Criteria
5	Phonemically accurate clear pronunciation throughout and correct
4	Occasional phonemic errors but generally comprehensible and nearly perfect
3	There exist several errors in pronunciation but it is generally accepted
2	Many phonemic errors, very difficult to perceive meaning
1	Incomprehensible and many words mispronounced and incorrect

c. Vocabulary

Score	Criteria
5	The words used are selected and have variation, they are relevant with the situation, condition and the listener's status so that the meaning make sense
4	The word choice generally relevant with the situation and have variation but there sometime appears inappropriate words which do not change the meaning of the sentence
3	The words have already been relevant with the topic and situation, they however do not have any variation yet
2	There are still lots of words used inappropriately
1	Poor and irrelevant words related to the topics and the situation given

d. Fluency

Score	Criteria
5	The speaker speaks naturally and continuously
4	The speaker generally speaks naturally and continuously but there sometime pauses at the unnatural points in utterance
3	There are some pauses but speaker manages to rephrase and continue
2	It runs less continuously, there often pauses
1	There are long pauses, utterances left unfinished or no response

b. Questionnaire

The close questionnaire was required to collect the data related to the use of authentic materials in teaching descriptive text to improve students' speaking ability. This close questionnaire consists of 12 items.

Each column of response has the following score:

- sangat tidak setuju (strongly agree) = 1
- tidak setuju (disagree) = 2
- setuju (agree) = 3
- sangat setuju (strongly agree) = 4

c. Interview

The interview was added to get additional information related to what extent the use of authentic materials in teaching descriptive text is effective to improve students' speaking ability. In this interview, there are 5 open-ended questions given to the representatives of experimental class after receiving the treatment.

2. Trying Out the Research Instruments

The try out was undertaken to measure the validity and reliability of the instrument. The try out was administered in other classes which are not involved in the research.

3. Testing the Validity and Reliability of the Instruments

To measure the validity of instrument, here is the analysis of the data:

$$r_{xy} = \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{\{N \sum x^2 - (\sum x)^2\} \{N \sum y^2 - (\sum y)^2\}}}$$

Note:

r_{xy} : coefficient correlation between x and y variable

x : score of variable x

y : score of variable y

N : the sum of samples

The criteria of validity of the instrument are as follows:

Table 3.2

Alpha Cronbach Coefficient Interpretation

Alpha	Degree of Validity
0,00 – 0,20	Very low
0,20 – 0,40	Low
0,40 – 0,60	Moderate
0,60 – 0,80	High
0,80 – 1,00	Very high

To find out the reliability of the instrument, here is the analysis of the data:

Where, $r_{xy} = r_1$

$$r_k = \frac{2 \times r_1}{1 + r_1}$$

Note:

r_k : coefficient of test reliability

r_1 : coefficient correlation

The criteria of reliability of the instrument are as follows:

Table 3.3

Alpha Cronbach Coefficient Interpretation

Alpha	Degree of Reliability
0,00 – 0,20	Very low
0,20 – 0,40	Low
0,40 – 0,60	Moderate
0,60 – 0,80	High
0,80 – 1,00	Very high

(Arikunto, 2003: 75)

4. Conducting the Treatment

This quasi experimental study was conducted to see the effect of two different treatments given to the experimental and control groups. Experimental group was taught speaking by using authentic materials in descriptive text while the control group was taught speaking without

using authentic materials in descriptive text.

In general, the teaching procedures can be described as follows:

- Preparing the authentic materials for teaching and learning process during the treatment which consists of magazine articles and posters
- Organizing teaching procedures by using four stages of learning for genre-based approach, suggested by (Hammond, et al. 1992: 17):
 1. Building Knowledge of the Field
 - Teacher and students built cultural context, shared experience related to the topic or materials that were presented.
 2. Modeling of Text
 - Teacher explained the definition and sources of authentic materials, the definition, purpose, generic structure and language features of descriptive text.
 - Teacher asked the student to make a group. Each group consisted of four students.
 - Teacher gave each group authentic materials, for example, a magazine article about celebrity and a poster of celebrity. Then, teacher asked the students to read and explore the text.
 - Teacher discussed the generic structure such as identification and description and the language features such as adjectives and linking verbs that exist in the text.
 3. Joint Construction
 - Teacher asked the students to accomplish several questions based

on the text.

- Discussing the right answer for the questions that have been answered by the students
- The students were still in a group of four. Then the teacher asked them to make another simple descriptive text about their favorite famous person (e.g. actor, actress, singer, etc.), where the generic structure is similar with the format that they have learnt before.

4. Independent Construction

- Teacher asked the students to produce a descriptive text individually by making another similar topic begin from description and then identification.
- The students acted it out in front of the class orally

Table 3.4

The Schedule of the Treatments

No.	EXPERIMENTAL GROUP		CONTROL GROUP	
	Date	Topic	Date	Topic
1.	Nov 12, 2008	PRETEST	Nov 13, 2008	PRETEST
2.	Nov 20, 2008	Lesson 1: Singer	Nov 21, 2008	Lesson 1: Pets
3.	Nov 27, 2008	Lesson 2: Actor	Nov 28, 2008	Lesson 2: The New Chef
4.	Dec 4, 2008	Lesson 3: Football player	Dec 5, 2008	Lesson 3: Debby
5.	Dec 18, 2008	Lesson 4: Tourism Places	Dec 19, 2008	Lesson 4: Missing Child
6.	Dec 24, 2008	POSTTEST	Dec 24, 2008	POSTTEST

7.	Dec 24, 2008	QUESTIONNAIRE	
	6 Meetings		6 Meetings

5. Giving Questionnaire to the Experimental Group

After conducting the treatment, questionnaire was administered to the experimental group to get the data that is required to find out the students' response toward the use of authentic materials in teaching descriptive text to improve their speaking ability.

6. Interviewing the Representatives of Experimental Group

Six of the experimental group was interviewed to get a description of additional information related to the use of authentic materials in teaching descriptive text.

E. Data Analysis

1. Test

The data obtained from the posttest and pretest was analyzed with the t-test calculation which covers the following steps:

- a. Testing the normality of distribution test.
- b. Computing the homogeneity of the variances test
- c. Computing the t-test by comparing the t_{obs} and t_{crit} .
- d. Testing the null hypothesis (H_0)

2. Questionnaire

The data obtained from the questionnaire was analyzed through the following procedure:

- a. Evaluating questionnaire
- b. Classifying the answer of the questionnaire.
- c. Describing and interpreting the data

In evaluating questionnaire, the data was analyzed through numeral percentage as follows:

$$P = \frac{F_o}{n} \times 100\%$$

Description:

F_o : frequency observed

N : Number of sample

3. Interview

The data obtained from the interview was transcribed and classified to get a description of additional information about the use of authentic materials in teaching descriptive text.