

CHAPTER III

RESEARCH METHODOLOGY

This chapter describes research design used in this study. It deals with the description of research method, hypothesis, population and sample, research instruments, procedures, data collection and data analysis.

3.1 Research Design

This research was conducted to compare students' listening comprehension and teaching learning process in international standard school and regular school. The design of this research is descriptive study. As Vanderstoep and Johnstons (2009) states that descriptive study describes the attitudes and behaviors observed during the investigation.

3.2. Hypothesis

The alternative hypothesis of this research is:

There is a difference between students' listening comprehension of international standard school and regular school.

Based on the test result, if the alternative hypothesis is accepted, it means that there is a difference between students' listening comprehension level in international standard school and regular school. On the other hand if the alternative hypothesis is rejected and null hypothesis is accepted, it means that

there is no difference between students' listening comprehension score of international standard school and regular school.

3.3. Population and Sample

The population of this research was 201 XI graders of an international standard school and 234 of a regular school in Cirebon. Arikunto (1993) stated that if the number of the respondents was less than 100 persons, it was better to take all the subjects. On the other hand, if the number of the respondents was more than 100 persons, it was necessary to take 10%-15% or 20%-25% of the whole population as the respondents. In this study the sample taken was 15% of the whole population.

$$15\% \times 203 = 30.45$$

$$15\% \times 234 = 35.10$$

Therefore this research involved 30 students of international standard school and 35 students of those in regular school. In order to conduct class observation, this study also involved a physics teacher and an English teacher of international standard school and an English teacher of regular school.

3.4. Data Collection

Data of this research were collected by conducting listening comprehension test and class observation. Score of the test was aimed at discovering students' achievement in listening comprehension. Class observation was conducted to describe teaching learning process in international standard school and regular school. Thus the data was in form of quantitative and qualitative.

3.5 Research Instruments

3.5.1. Test

Listening comprehension test was administered in this research to answer research question 1 which is whether there is a difference in terms of listening comprehension between students' in international standard school and those in regular school. The test was aimed at investigating the achievement of students' listening comprehension. Hughes (1989) states that test is administered to see students' language skill achievement. The test items were taken from Senior High School National Test year 2008, 2009, and 2010. The items were in form of multiple choices. The number of the listening test in each year was 15. They consisted of 4 parts.

The type of the questions was consistent in each year. It can be seen on the following table.

Table 3.1 The Outline of Listening Comprehension Test

Part	Number of Items	Detail
1	11	Identifying main ideas of dialogues
2	9	Identifying pictures based on the dialogues or monologues
3	13	Completing dialogues using appropriate responses
4	12	Answering questions based on the spoken texts
Total	45 Items	

In answering the questions, students were required to listen to the questions, dialogues, and monologues on the cassette recording, afterwards they read the five possible answers provided on the answer sheet and decided which was the best answer to the question they had read.

The sample questions are provided below:

On the recorder:

1. *Man: Do you use the internet very often?*

Woman: Yes I do. I use it for communication

Man: How do you communicate with it?

Woman: I send and receive email and I speak with my friend by voice mail

What are they talking about?

A. How to use email

B. Internet usage

C. Receiving mails

D. Voice mail

E. Communication

The complete test items can be seen in appendix D.

3.5.2 Observation

This study also used observation conducted in International standard school and regular school. “Observation refers to the process of making careful and accurate measurements, which is a distinguishing feature of well-conducted scientific investigations” (Marczyk, *et al*, 2005:6). Therefore, this observation was aimed to answer research question 2 which elaborated the factors which influence students’ listening comprehension in terms of the process of teaching learning in the classroom. Video recording is used to support the data collection and to see detailed activities during observation. Vanderstoep and Johnston (2009:239) believe that video recording in collecting data of observation to describe attitudes and behavior during research. The observation was conducted in a bilingual class in international standard school and English class in both international standard school and regular school to find out the factors which influence students’ listening comprehension adapted from Martinez, *et al*. (2000) and Brown (2000).

In addition, this study also included interview which involved those three teachers. Marczyk, *et al* (2005:117) assume that “interview is a form of self-report that is a relatively simple approach to data collection”. In so doing interview can help researchers to collect brief information. In this study the

interview was administered after conducting the observation aimed to clarify information about the use of English as language of instruction and the activities during teaching listening process.

3.6. Data Analysis

This research worked with quantitative data using test and qualitative data using observation. The result of observation was interpreted based on the theories of experts.

The quantitative data was from t-test, Martono (2010) describes t-test as a statistical procedure used in comparing two means if the data is interval or ratio. Thus students' scores were collected and analyzed using t-test in statistics to test comparative hypothesis which involved two independent samples.

The steps of the t-test calculation are:

1. setting the hypothesis and alpha level at 0.05 (two-tailed test).
2. analyzing the independent t-test by using "compare means" with independent samples on SPSS 16.0.
3. comparing t_{obt} with the level of significance. If the t_{obt} is equal to or greater than the level of significance, the null hypothesis is accepted. It indicates that there is no significant difference between the two sample means. (Hatch and Farhady, 1982)

The qualitative data was gained from observation. Some categories were made to analyze observation result through some related theories listed in the table below.

Table 3.2 Observation framework

1.	Martinez, at al. (2000)	Academic language exposure to listening	Frequency of using English as instruction
2.	H. Douglas Brown (2000)	Types of Listening Performance	1. Reactive 2. Intensive 3. Responsive: asking questions, giving command, checking comprehension, seeking clarification. 4. Selective 5. Extensive 6. Interactive

The data of observation was analyzed using some following steps:

1. transcribing video recording of three class observations to display language used in the classroom
2. categorizing factors which influence students' listening comprehension in terms of the process of teaching learning in the classroom.
3. analyzing data by calculating frequency of using English as instruction in both schools. Teachers' utterance was categorized into three types: English, code switching, and Bahasa Indonesia. This study, however, only focuses on the

total number of teachers' English instruction by calculating the teachers' talk.

(Brown, 2000)

4. analyzing the types of listening performance used in the classroom (Brown, 2000). The detailed description is presented in chapter 2.
5. presenting the result descriptively based on the related theories.

