CHAPTER III
METHODOLOGY

This chapter describes the methodology of the study, the techniques for data collection and data analysis of the study.

3.1 Method of the Study

This study was qualitative research conducted by means of a descriptive method; i.e. a research method that explored a social or human problem, in which the researcher conducted the study in a natural setting (Creswell, 1998:15). This study was relevant to the descriptive method that aimed at describing and analyzing a phenomenon, event, social activity, attitude, and perception in a certain group (Sukmadinata, 2008). In curriculum and education, descriptive method was used to describe phenomena such as the teaching and learning process, the instructional activities, the curriculum implementation etc (op cit). In this study, the descriptive method was used to describe the designing and implementing of learning tasks that accommodated the students' learning styles, the barriers faced by the teachers in designing and implementing the learning tasks that accommodated students' learning styles, and the students' responses toward the learning tasks. In this descriptive study,

the data were collected, classified, presented, analyzed, and interpreted into a coherent description.

3.2 Site and Participants

The study was conducted at SMA Plus Muthahhari located on Jl. Kampus II No. 13-17 Kiaracondong, Bandung. SMA Plus Muthahhari was chosen because this school has applied the Quantum Learning since 1999 and the learning styles approach is applied in designing the learning tasks. The study involved three English teachers and twenty-five of 11th grade students. The class was chosen among others based on the recommendation of the school's staff. In this study, two teachers (teacher 1 and teacher 2) taught regular English meetings; while, a teacher (teacher 3) taught English "khas" meetings that focused on school based curriculum (*kurikulum yayasan*).

3.3 Techniques for Data Collection

The data were collected by means of interview, class observation, and questionnaire. The interview was conducted to get the data about the teachers understanding of students' learning styles, their considerations in designing learning tasks, and the barriers they faced in designing and implementing learning tasks (see Appendix 1 for the interview items). Class observation was used to collect the data about the implementations of learning tasks that were designed to accommodate the learning styles of students. The questionnaires were distributed to get the data of students' responses toward the learning tasks.

3.3.1 Interview

In this study, the interview was intended to obtain in-depth information through direct communication between the researcher and the respondents or the way the data were elicited by one person from another through person-to person encounters (Nunan, 1992). It was aimed at obtaining the information that was not gained from observation or questionnaire (Alwasilah, 2006). The interview was conducted with teachers and three students based on their different learning style tendencies. The interview was structured and used Bahasa Indonesia in order that the data could be easily transcribed, analyzed, and interpreted. In this study, informal interview was used in order that the respondents could be more expressive in giving their perception without any pressure of being researched.

The first interview was conducted with the teachers in three separate days. The interview was held in a quiet room after the teaching and learning process. It was aimed at obtaining comprehensive information from the teachers without any interference from others. The first day interview was conducted with Mrs. Esti (teacher 1) on Monday, 28th July 2008. The second day interview was conducted with Miss San San (teacher 2) on Thursday, 31st July 2008 and the third day interview was conducted with Mrs. Feli (teacher 3) on Saturday, 2nd August 2008.

The second interview was conducted with three students for their different learning style tendencies. The interview involved five questions about their responses toward the learning tasks that were designed to accommodate their learning styles and was conducted after six meetings of teaching and learning process. It was held in one day on Thursday, 14th August 2008.

3.3.2 Observation

The Observation was aimed at getting information about the implementation of learning tasks that were designed to accommodate the students' learning styles. It was the description of behavior that occurred naturally; a technique of collecting data through monitoring the object by making notes of that condition (Fathoni, 2006). From the observation, the researcher might see the tacit understanding, theory-in-use, and the teachers' point of view that might not be obtained through interviews or surveys (Alwasilah, 2006). The observation was conducted in six meetings consisting of four meetings of regular English class and two meetings of English "khas" class. Field notes were used in the observation. Besides that, the researcher recorded the teaching and learning process by using a video recorder in order that the data could be transcribed and analyzed (see Appendix 2).

3.3.3 Questionnaire

The questionnaires were distributed to the teachers and students and the data gained were presented by means of tables or graphs. The first questionnaires, which

consisted of five close-ended questions, were distributed to the teachers to supplement the data about their perception of the implementation of learning tasks that were designed to accommodate the students' learning styles.

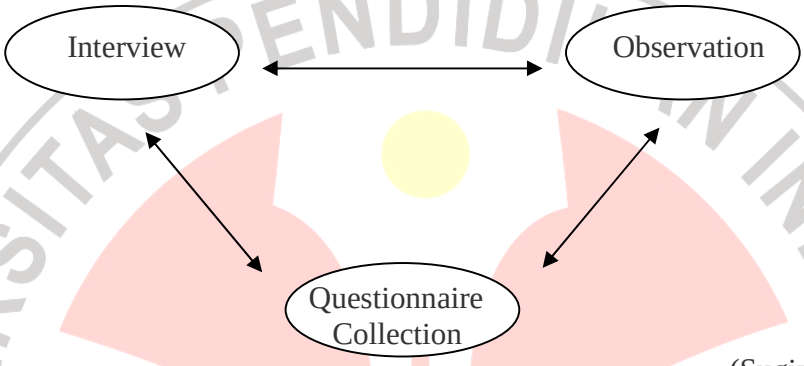
The second questionnaires, which consisted of fifteen close-ended questions, were distributed to students to supplement the information about students' learning style tendencies in a class selected. The questionnaires were distributed before the teaching and learning process.

The third questionnaires were intended to know the students' responses toward the learning tasks. The questionnaires, which consisted of ten close-ended questions, were distributed after six meetings of the teaching and learning process. Since the questionnaire items were modified by Likert-type scale; each statement of the questionnaire was valued in scale 1 to 5 for categories: Strongly Agree (A), Agree (A), Uncertain (U), Disagree (D), Strongly Disagree (SD) (Mueller, 1986).

3.5 Data Analysis

In this study, Triangulation technique was used to analyze the data; it was the qualitative cross-validation that assessed the sufficiency of the data according to the convergence of multiple data sources or multiple data collection procedures (William in Sugiyono, 2008). It was aimed at presenting valid and reliable data that were gained from interview, observation, and questionnaire and minimizing the bias of data collection (Alwasilah, 2006).

Figure 3.5
Triangulation in Data Analysis Technique



(Sugiyono, 2008)

In this study, there are two ways in analyzing the data; Quantitative and Qualitative, as follows:

3.5.1 The Analysis of Quantitative Data

The data gained from questionnaire were analyzed by using the calculation of percentage technique as follows:

$$R = \frac{P}{F} \times 100\%$$

R : respondents' percentage
P : the number of respondent that choose each option
F : the number of all respondents

After the data were calculated by using the percentage technique, the data were analyzed by using the criteria as follows:

Figure 3.5.1
The Percentage and Criteria of Data Questionnaire

R (%)	Criteria
0	None
1 - 25	A few of
26 - 49	Nearly half of
50	A half of
51 - 75	More than a half of
76 - 99	Nearly all of
100	All of

(Mueller, 1986)

3.5.2 The Analysis of Qualitative Data

The data gained from interview were analyzed by conducting the following steps:

1. Recording the interview with the respondents
2. Transcribing the results of the interview of each respondent
3. Synthesizing the scripts of the results
4. Interpreting the intent of the respondents' answer
5. Analyzing the results into a coherent description

The data gained from observation were analyzed by conducting the following steps:

1. Observing and recording the teaching and learning process in classroom activities
2. Taking the field notes of the learning tasks that were applied in learning process

3. Analyzing and interpreting the results into a coherent description

The data from questionnaire were analyzed by conducting the following steps:

1. Distributing the questionnaire to students
2. Collecting and calculating the results by using the percentage technique
3. Analyzing the results based on the criteria of percentage