#### **CHAPTER III**

### RESEARCH METHODOLOGY

This chapter discusses the methodology and design used in this study, population and sample of the study, data instrument, measurement, and research procedure.

# 3.1. Methodology and Design

The methodology used in this study was a survey since the study was conducted to find generalization from a population. As stated by Bell (1993), a survey will aim to get information from representative of a population. It is also supported by Burns (2005:566) who states that a descriptive survey aims to estimate as possible the nature of existing conditions, or the attribute of a population. Furthermore, Creswell (2008:388), Survey Research Design are procedures in a quantitative research in which investigators administer a survey to a sample or to the entire population of people to describe the attitudes, opinions, behaviors, or characteristics of the population. Moreover, the characteristics of the survey found by Burns (2000:567) are:

- It requires a sample of respondents to reply to a number of standard questions under comparable conditions.
- 2. It may be administered by an interviewer, by mailing the respondent a form for self-completion or by telephone.

- 3. The respondents represent a defined population. If less than 100 percent of the defined population is sampled then a sample survey has been conducted but if it is a 100 percent survey is a census.
- 4. The result of the sample survey can be generalized the population.
- 5. The use of standard questions enables comparisons of individuals to be made.

In this case, the study was designed to obtain factual data concerning English teachers' competences at Business and Management Program of *SMK Negeri* in South Jakarta.

## 3.2. Population of the Study

The populations of the study were English teachers, principals, and students at Business and Management Program of *SMK Negeri* in South Jakarta. There are 45 English teachers, 11 principals, and 6316 students based on *www.ditpsmk.net*.

## 3.3. Sample of the Study

The sampling technique of this study was simple random sample. As stated by Anto Dajan (1986), simple random sample is a technique in choosing sample which each individual has the same probability of being chosen at any stage during the sampling process. The samples of the study were 31 English teachers, 10 principals, and 99 students (based on Slovin Formula with sampling error 10% <see appendix>) at Business and Management Program of 10 *SMK Negeri* in South Jakarta. The 10 schools are *SMKN* 6 Jakarta, *SMKN* 8 Jakarta, *SMKN* 15

Jakarta, *SMKN* 20 Jakarta, *SMKN* 25 Jakarta, *SMKN* 41 Jakarta, *SMKN* 43 Jakarta, *SMKN* 47 Jakarta, *SMKN* 59 Jakarta, and *SMKN* 62 Jakarta.

#### 3.4. Data Instrument

In collecting the data, there were two instruments used in this study. They were questionnaires and interview. The questionnaires were in Indonesian and distributed to the 10 *SMK Negeri* in South Jakarta. The interview was done to confirm the questionnaires that had been answered.

### 3.4.1. Questionnaire

The questions in the questionnaire were based on *kisi-kisi angket* (see appendix). *Kisi-kisi angket* were made by making indicators of each pedagogic competence, personality competence, professional competence, and social competence which variable taken from the scopes or definitions of the competences stated in chapter 2 and modified based on the characteristics of English teachers of *SMK*. The forms of the questions in the questionnaire were open and close ended questions. The questionnaires were distributed for English teachers, principals, and students. Items in the questionnaires for English teachers and principals were similar in order to find out the different perspective for the answers. Besides, the questionnaires for English teacher were the self assessment of the English teacher about their pedagogic competence, personality competence, professional competence, and social competence. The questionnaires for

students were made to support data for pedagogic competence and professional competence of English teachers.

#### 3.4.2. Interview

The interview was held to strengthen the data of the questionnaire. Questions of the interview were covered the questions about teachers' competences. The interview was important because it gave clearer information related to the questionnaire. In addition, the interview with the English teachers was done in English.

## 3.5. Measurement

Before the questionnaires were distributed, they were tried out first to check validity and reliability.

## **3.5.1.** Validity

Content Validity is used to test the validity of all items in the questionnaire, as stated by Azwar (2009:45), content validity is a validity that has been estimated by measuring the test using rational analysis or professional judgment. In this case, the validity of the questionnaire was tested by the judgment of an expert, a lecture. Azwar (2009:45) also explains that the answer of the question in this validity is "how far the items in the test include the whole area of the measured object." The questionnaire employed here involved the whole area of teacher's

competences, as the target area. Supported by those statements, it can be concluded that the questionnaire employed here are quite valid.

## 3.5.2. Reliability

As stated by Arikunto (2006), Alpha formula is used in finding reliability of the questionnaire since the questionnaires used Likert scale which range were *Sangat Setuju*, *Setuju*, *Kurang Setuju*, *Tidak Setuju*, and *Sangat Tidak Setuju*. And Alpha formula is appropriate for this type of questionnaire. Besides, Alpha formula was used to measure the internal consistency of the data and was found through statistic software program that is *SPSS* to test the reliability. After finding the reliability, the standard reliability is needed to see whether the reliability of the questionnaire high or low as stated by Arikunto (2006:276):

r points	Interpretation
0,800-1,000	High
0,600-0,800	Fairly High
0,400-0,600	Fairly Low
0,200-0,400	Low
0,00-0,200	Very Low

The results of the reliability test are 0.971 (high) for teachers' questionnaire, 0.965 (high) for principals' questionnaire, and 0.822 (high) for students' questionnaire.

#### **3.6.** Research Procedure

#### **3.6.1.** Data Collection

The data were collected by giving questionnaire and interviewing English teachers, principals, and students at Business and Management Program of *SMK Negeri* in South Jakarta. First, questionnaires were distributed to English teachers, principals, and students at the 10 *SMK Negeri* in South Jakarta. Then, the English teachers, the principals, and the students were asked to fill the questionnaire about *SMK* English teachers' competences. While the questionnaires were taken back from the respondents, they were checked first whether some questions had not been answered completely. After having the result of the questionnaires, the interview was conducted with some English teachers, principals, and students in order to confirm the questionnaires.

## 3.6.2. Data Analysis

#### 3.6.2.1. Questionnaire

The respondents' answers of the questionnaire were tabulated and measured by using simple frequent percentage. The formula is <u>total respond</u>: <u>sum of sample x 100%</u>. Then, the findings were interpreted based on the percentages. After that, the interpretations were discussed based on the headings of the competences. The discussion was supported by interviewing the *SMK* English teachers, principals, and students.

# **3.6.2.2. Interview**

The data obtained by interview were transcribed and then analyzed by using descriptive method. It was designed to strengthen the result of the data gained from the questionnaire