#### **CHAPTER III**

#### METHODOLOGY

The researcher will present this research methodology that includes the research methodology; subjects; settings; and procedures included techniques of data collection and data analysis.

### 3.1 Research Methodology

The study was conducted to analyse the learning materials with students' of third grade Teknik Komputer dan Jaringan in East Jakarta and Central Jakarta. The method used to conduct this research was a case study method. The case study is used to intensively analyze and describe a single unit or system bounded by space and time (Hancock & Algozzine, 2006, p. 9-11). In this study, the system being the case is the learning materials in English class for TKJ students. The case study, in addition, was chosen because it is the preferred method when 'how', 'who', 'why', or 'what' questions are being asked (Burns, 2000, p.460). Through the case study method, the researcher used the questionnaire and interview to collect the data which include the student perception of learning materials in English class. The researcher also aimed to find out the students needs so the techniques used are questionnaires, observation and interviews (Richard, 2001, p.33).

## **3.2** Subjects of the Study

The subjects of the study were the third grade students of Vocational High School or *Sekolah Menengah Kejuruan* (SMK) majoring in Computer and Networking (*Teknik Komputer dan Jaringan* (TKJ)) from ten schools which are seven schools of all are located in Central Jakarta, they are *SMKN 1 Boedi Utomo Jakarta, SMK Muhammadiyah 1 Kemayoran* and *SMK Taman Siswa 2 Kemayoran;* while others seven schools are located in East Jakarta ; they are *SMKN 26 Pembangunan Jakarta, SMKN 22 Jakarta, SMKN 7 Grafika Jakarta, SMK PKP 2 Jakarta Islamic School, SMK Ristek Jaya, SMK IPTEK Jaya* and *SMK Teratai Putih.* Schools mentioned are chosen from the list of schools which have the TKJ as one of the programs conducted.

From each school, researcher would take one class of XII TKJ as a sample and asked the students to fill the research questionnaire and then 5 students from each class will be randomly selected to be interviewed. Besides the students, the teachers of XII TKJ class selected were also involved to be asked to fill the questionnaire and to be interviewed.

The reasons why researcher selected XII grade as the sample is based on the assumption that researcher has; XII grade students have already get most of materials or topics stated in syllabus.

## 3.3 Settings

The study focused on the learning materials and students' need analysis of English. The study started from October – December 2012 in ten schools. *SMKN*  Boedi Utomo Jakarta, SMK Muhammadiyah 1 Kemayoran and SMK Taman
Siswa 2 Kemayoran; SMKN 26 Pembangunan Jakarta, SMKN 22 Jakarta, SMKN
7 Grafika Jakarta, SMK PKP 2 Jakarta Islamic School, SMK Ristek Jaya, SMK
IPTEK Jaya and SMK Teratai Putih.

## **3.4 Data and Data Source**

The data are the answers of students and teachers in those ten schools with the result of observation from those three schools chosen randomly and also the result of book analysis as the additional data that provides additional information about the activities and materials of English. The data sources of this research are a class of XII TKJ form the ten schools, an English teacher form each schools, classroom activity form 3 schools and a text book used in three schools.

### **3.5 Instruments**

This research used quantitative and qualitative techniques for data collection and analysis. The data were collected through questionnaires to get quantitative data, interviews to get qualitative data and class observation to get qualitative data as well.

## 3.5.1 Questionnaire

Two closed answer questionnaires, for students and teachers, were divided into three parts. First part is consisting of 5 points which all about general statement of their experience in learning English. The second part is answer of students will be used to find out the most given materials that student's got along their English learn experience in school. The last part is created to find out students activities that applied the most while their learning English, which will be use by the researcher to get an exact description if English lessons students get are fulfilled students' needs or students' aims in learning English.

The difference between students' and teachers' questionnaire are the statement column they have to choose. The difference appears in second part and third part. In the second part, statements related to the materials give, teachers are expected to answer 'Memberikan' while students are asked to choose option 'Diberikan' and /or'Dibutuhkan' if the statement are true based on their experience this part is aimed to find out the learning materials and students' needs of English.

## 3.5.2 Interviews

The interview was conducted to gain additional clearer information on the learning materials, students' needs and information of students' productive class. Researcher also interviewed teachers to find out their opinion whether their English is English for Academic English or General English. The interview will be delivered to 5 students in each school or class chosen.

#### 3.5.3 Classroom Observation Sheet

This instrument used to find out the activities, students' participation during the class, and percentage of English teacher used in class. There will be 3 classes researcher will observed. The data will be used to be supporting data of the study. To do this, researcher made an observation sheet with open questions that researcher answer based on the classroom activities.

#### 3.5.4 Materials Evaluation Checklist

The checklist of materials or in this case is the text book is used to evaluate the appropriateness to the students' needs. Checklist that researcher will use is the one that provided by Tom Hutchinson and Alan Walters in *English for Specific Purposes* (p.99 – 104). Researcher itself choose to use the objective analysis list since researcher won't to find out the requirements of materials but the appropriateness materials for whole students.

## 3.6 Pilot Study

Before do the research, the researcher conducted a pilot study in August 2012 in SMKN 26 Pembangunan Jakarta. The pilot study is conducted by interview some students in XII TKJ 2 and English teachers of that class.

#### 3.7 Data Analysis Techniques

The questionnaire data were processed by using Microsoft Excel 2007. The data processed are then presented in the form of tables, charts and narrative discussion (Creswell, 2008, p.262). Meanwhile, the data from the interview and classroom observation were used as qualitative description to verify, clarify, and complement the data obtained through the questionnaire. The data from the textbook analysis are presented in the form of the checklist table showing the appropriateness of book's contain.

## 3.7.1 Questionnaire

Questionnaire will be analyze using the Ms. Excel 2007 table and using the 'Sum' formula for counting how many students choose a certain statement. Since researcher use a close answered questionnaire so the answer will be easily count by adding the answer.

### 3.7.2 Interviews

After delivered the interview researcher will do the transcription

process to find out clearly what the interviewee statements are. So researcher will be able to analyze and match the questionnaire result, especially to find out students or teachers' perception toward the English lesson in their school.

# 3.7.3 Observation

Observation result written in the Observation sheet as the prove and a record for the researcher how the classroom activities are conducted. The results of this instrument will be used to provide supported information.

## 3.7.4 Materials Evaluation Checklist

Materials evaluation checklist will used to give a description towards the appropriateness of textbook by the schools observed by the researchers. After getting the data, researcher will use the data to apply in support details for the findings.