#### **CHAPTER III**

#### **METHODOLOGY**

This chapter contains the information about research design, subjects of the study, time and place of the study, data and data source, instruments of the study, piloting study, and research procedures.

## 3.1 Research Design

This study used a case study as a research method. According to Bromley (1990), it is a systematic inquiry into an event or a set of related events which aims to describe and explain the phenomenon of interest (p. 302). Yin (2003) stated that "how" and "why" questions are more likely lead to the use of case studies. The research question of this study is how. It means that case study can be used to answer the research question of this study.

This study was conducted in quantitative and qualitative research. The mixed methods were used to investigate the students' English reading needs and English reading materials. Creswell (2008) stated that mixed method research design is a procedure for collecting, analyzing and and "mixing" both quantitative and qualitative methods in a single study or a series of studies to understand a research problem (p.535). In finding students' needs, the researcher distributed a set of questionnaires and conducted interviews. Because the writer collected the data of the reading needs of *Teknik Kendaraan Ringan* students by using questionnaires and interviews, and also find out the reading materials by

analyzing the textbooks that were used the most by the teachers, the mixed methods used in this study.

This study is focused on automotive major, particularly on *Teknik Kendaraan Ringan* in vocational school. In the preliminary study, there was an issue that standard of competences and basic competences in English lesson in vocational school were not distinguished based on each major. In fact, the standard of competences and basic competences need to be distinguished because vocational school students have different needs which are based on the demand in each target situation. As the issue stated above, the writer is willing to find out the relevance of reading materials to the reading needs of *Teknik Kendaraan Ringan* students. *Teknik Kendaraan Ringan* students need to be able to understand the written texts, such as written instruction, standard operational procedure, etc since they are prepared to be a technician, service advisor, parts counter person, shop foreman or service manager who might be deals with native customers, and even bosses who come from different countries other than Indonesia.

# 3.2 Subjects of the Study

The subjects of the study were the eleventh grade students of Vocational High School majoring in Automotive (*Teknik Kendaraan Ringan*) from fifteen schools that are located in Jakarta, which are *SMK Negeri 1 Jakarta*, *SMK Negeri 5 Jakarta*, *SMK Negeri 26 Jakarta*, *SMK Negeri 34 Jakarta*, *SMK Negeri 35 Jakarta*, *SMK Negeri 39 Jakarta*, *SMK Negeri 56 Jakarta*, *SMK Angkasa*, *SMK* 

Berlian, SMK Dinamika Pembangunan, SMK Jakarta 1, SMK Kampung Jawa, SMK Malaka, SMK Poncol, and SMK Teratai Putih.

From each school, the writer would take one class of XI *Teknik Kendaraan Ringan* as a sample and asked the students to fill the questionnaire and then 2 students from each class will be randomly selected to be interviewed. Besides the students, the teachers who taught English in XI *Teknik Kendaraan Ringan* class selected were also involved to be asked to fill the questionnaire and to be interviewed. As for the practitioners, the writer would like to ask the practitioners who work in the workshop or autoshop as the mechanics or technicians to fill the questionnaire and to be interviewed.

## 3.3 Time and Place of the Study

The data collection was conducted from February 2015 to May 2015. They were collected from the eleventh grade students in vocational high schools that have automotive major. There were fifteen vocational high schools, in Jakarta that have automotive major, particularly *Teknik Kendaraan Ringan*; *SMK Negeri 1 Jakarta*, *SMK Negeri 5 Jakarta*, *SMK Negeri 26 Jakarta*, *SMK Negeri 34 Jakarta*, *SMK Negeri 35 Jakarta*, *SMK Negeri 39 Jakarta*, *SMK Negeri 56 Jakarta*, *SMK Angkasa*, *SMK Berlian*, *SMK Dinamika Pembangunan*, *SMK Jakarta 1*, *SMK Kampung Jawa*, *SMK Malaka*, *SMK Poncol*, and *SMK Teratai Putih*. The study was conducted in all vocational high schools mentioned above and also in some workshops in Jakarta, which are Shop and Drive, Astra International Tbk – Isuzu, and 1 Station.

#### 3.4 Data and Data Source

The primary data of this study are the answers from the questionnaires (includes the students' questionnaires, teachers' questionnaires, and practitioners' questionnaires) and the answers from the interviews with the students, the teacher, and with the practitioners to find out the students' reading needs, materials given, and activities done. Then, there are the result of document analysis as the additional data that provides additional information about the English reading materials given in the classroom

The data source of this study was gathered through students' questionnaires, rechecked through teachers' questionnaires and practitioners' questionnaires, and then supported from the interview based on the interview form. Another data source is a textbook that used in ten schools.

## 3.5 Instruments of the Study

To collect the data, the writer used three kinds of research instrument; questionnaire, interview, and document analysis. The questions for questionnaire and interview were made in *bahasa Indonesia* to avoid misunderstanding for the participants. The questions within the questionnaire for the students, practitioners and the teachers were likely the same. In the questionnaire for students and practitioners, the questions were focused on their reading needs in class and workplaces. Meanwhile the questions in the teacher questionnaire were focused on the materials and activities given by the teacher. Whereas for the interview, the questions for students, teacher, and practitioners were different. In the teachers'

interview, the questions were focused on the reading materials and activities given to the students. Meanwhile in the students' interview, the questions were focused on their reading needs in class and in their future workplaces. In the practitioners' interview, the questions focused on what reading activities that they face in the workplaces and what reading skills that they need in order to function well in the workplaces.

No.	Instrument	Data			
1.	Questionnaire	-	Reading materials		
		-	Reading materials related to grammar		
		-	Reading materials related to		
			vocabulary		
		-	Reading activities		
2.	Interview	-	Reading materials		
		-	Reading materials related to grammar		
		-	Reading materials related to		
			vocabulary		
		-	Reading activities		
3.	Document		Toucherst		
	Analysis		Textbook		

#### 3.5.1 Questionnaire

There is only one version of questionnaire involved in this study. The questionnaire is for students, tecahers, and practitioner. All of the questionnaires were in *bahasa Indonesia* in order to be more easily understood by the students and avoid misuderstanding. The students' and practitioners' questionnaire were made to find out their needs in reading while the teachers' questionnaire was made to identify the reading materials given in the class. The results from teachers' questionnaire then compared to the reading needs of the students.

The questionnaire was divided into 2 parts that have different specification of the questions. The first part has 29 questions which ask about the reading materials, reading materials related grammar and vocabulary given by the English teachers. Whereas the second part has 16 questions which ask about the reading activities, reading activities related grammar and vocabulary given by the English teachers in the class. There were total 45 questions in each questionnaire. In the end of every specification section, there were blank spaces to be filled by the participants with their own answer, if they want to.

In this study, the questionnaire was made by using the Dichotomous question. Dichotomous question is a question that has two possible responses; yes/no, true/false, or agree/disagree. For this study, the possible answers in the questionnaire are Yes (represented by checklist) or No (represented by dash). The questionnaire for students and teachers were made by divided the options for each statement into two, *diberikan* (given) and *dibutuhkan* (needed), meanwhile the questionnaire for practitioners only have one options, which is *dibutuhkan* 

(needed). The participants have to choose whether or not the materials and activities are needed, and whether or not the material and activities are given.

The table below is the example of the questions in the questionnaire:

No.	Pernyataan	Diberikan	Dibutuhkan
3	Materi dalam keterampilan membaca (reading) yang diberikan adalah:		
	a. Memo		
	Contoh:		
	"Don't foget to restock the Yamalube lubricant."		
	b. Surat bisnis (business letter)		
	Contoh:		
	Membaca complaint letter		
	c. Standard Operational Procedure (SOP)  Contoh: Check the carburetor		
	Check the carburetor		

Those questions above are included in the questionnaire to find out whether the reading materials have already given or not by the teacher and whether that materials are needed by the students or not.

### 3.5.2 Interview

Interview is used to support the data collected from the questionnaire. Questions in the interview related to the reading needs, reading material, and reading activities were used in the interview for the students, teachers, and practitioners in order to acquire information more deeply. There were 7 questions in the students' interview, there were 7 questions in the teachers' interview, and there were 7 questions in the practitioners' interview. The interviews were

delivered in *Bahasa Indonesia* in order to make the respondents be easier in responding the questions and avoid misunderstanding.

The interviews were conducted to one or two students from each school, one teacher from each school, and also to six practitioners such as mechanic, technician, service advisor, etc. Besides to support the data collected from the questionnaire, interview can make the writer gets clearer answers about why and how questions about automotive that cannot be measured only through questionnaires. The total of all interview respondents are twenty three automotive students, fiveteen English teachers, and six practitioners. The interviews were recorded and then was transcribed. They were reported descriptively in order to support the data which were got from the questionnaires.

These questions below are some examples of the student interview questions:

- 1. Apakah kemampuan berbahasa Inggris (reading, writing, listening, speaking, grammar, vocabulary) yang kalian pelajari di kelas penting untuk kalian nanti di dunia kerja? Kenapa? Contohnya apa?
- 2. Saat belajar reading, materi seperti apa yang diajarkan oleh guru? Apakah materi tersebut terkait dengan jurusan TKR?
- 3. Saat belajar reading, kegiatan yang sering diberikan oleh guru di dalam kelas apa?

These questions below are some examples of the teacher interview questions:

- 1.Berapa persen penggunaan bahasa Inggris saat sedang belajar di kelas?
- 2. Saat mengajar reading, apakah materi yang Bapak/Ibu ajarkan terkait dengan jurusan TKR? Contohnya materi apa?
- 3. Aktifitas apa saja yang Bapak/Ibu lakukan untuk mengajarkan reading?

  Mengapa memilih kegiatan tersebut?

These questions below are some examples of the practitioner interview questions:

- 1. Menurut Anda, seberapa penting peran bahasa Inggris dalam pekerjaan Anda?
- 2. Apakah reading banyak digunakan dalam pekerjaan Anda? Jika iya, digunakan untuk apa saja?
- 3. Hal-hal tentang apa saja yang biasanya Anda bicarakan menggunakan bahasa Inggris dengan lawan bicara Anda (misalnya kepada customer, rekan kerja, atau atasan?

# 3.5.3 Document Analysis

The aims of document analysis is to analyze the textbooks which were mostly used in the eleventh grade in fifteen vocational high schools to find the materials given. It was analyzed by using objective analysis. Hutchinson & Waters (1987) stated that objective analysis refers to evaluate the materials provided in the classroom. There are five main points in conducting objective analysis, which are audience, aims, content, methodology, and other (price and

availability). Audience is focused on the learners, aims are related to the purpose of the course, content deals with what materials that are given to the students, methodology deals with how the learning is conducted, and price and availability are related to the price needed and the time of the materials can be available.

## 3.6 Piloting Study

Piloting study was conducted before the writer started the study. The writer tried out the questionnaires to ten automotive students in the eleventh grade. The students were chosen randomly. Piloting instruments is used to check whether the students have difficulties in filling the questionnaires or not. It is also used to check whether the questions provided in questionnaires are effective to be used to collect the data and answer the research questions. When it had been distributed, the writer found that eight of ten students could understand and answer the questions properly. The writer then also tried the interview questions by interviewing five eleventh grade automotive students. The students had no difficulties in answering the interview questions since it used bahasa Indonesia. In addition, the interviews results are also used to answers why and how question related to reading which cannot be measured only through the questionnaires.

#### 3.7 Research Procedure

#### 3.7.1 Data Collection

The data are collected through distributing questionnaires, conducting a classroom observation, conducting interview to the students and English teachers

at Vocational High School or *Sekolah Menengah Kejuruan (SMK)* that have automotive major in Jakarta, and also to the practitioners who work in the automotive scope, and conducting a document analysis. Firstly, the writer conducted a classroom observation in fifteen *SMK* that have automotive major in Jakarta to know how the English lesson, particularly in practice reading activities, is going. After that, the writer distributed the questionnaires to the students and English teachers of automotive. Then, after the completion of all questionnaires, the researcher chose randomly 2 students from each class and one English teachers who already filled the questionnaires to be the interviewees. The interviews were recorded using voice recorder.

As for the practitioners, firstly the researcher searched the alumni by asking the teachers to see the alumni list who work in the automotive field such as being a mechanics, techinicians, servive advisor, etc. Beside that, the researcher also looked for the workers through colleagues and relatives. After that, the questionnaires were distributed to 6 practitioners and the interview was conducted to the all practitioners.

Then, the writer conducted a document analysis. The writer analyzed the textbook which were mostly used in the eleventh grade in fifteen vocational high schools, which is *Get Along with English for Vocational Schools Grade XI in Elementary Level*, written by Entin Sutinah, dkk which is published by Erlangga in 2010 to find out the materials provided in this textbook.

## 3.7.2 Data Analysis Procedures

In data analysis procedures, the first data was the data which were gained through the questionnaires. The data were calculated by using Microsoft Excel. It was then presented in form of chart. In the questionnaires, the writer got the answers of what the reading needs of *Teknik Kendaraan Ringan* students and practitioners and what reading materials and activities given by the teacher. The result was then compared and analyzed in order to find out the relevance.

After that, the writer transcribed and analyzed the data gained from the interviews. It was transcribed in order to support the data collected from the questionnaires. Some lines from the interviews were used as the examples and evidences of what being said in the analysis of the questionnaires. The writer also use the classroom observation sheet that has been filled during the English reading learning process to know the material given and activity done in the classroom. To confirm the data, the results from the descriptions of observation were compared to the result of the questionnaire and the transcription of the interview. Then, the writer analyzed *Get Along with English for Vocational Schools Grade XI in Elementary Level*, written by Entin Sutinah, dkk which is published by Erlangga in 2010 to find out the material provided in this textbook and the relevance between these materials to the students' needs.