CHAPTER 3
RESEARCH METHODOLOGY

This chapter discusses the methodology used in the study. This chapter includes formulation of the problem, research design, site and respondents, data collection method, and data analysis.

3.1. Formulation of the Problem

This study was conducted based on the following questions to achieve the aims of the study.

1. What difficulties are encountered by 12th graders of software engineering (SE) programme at a vocational school in Bandung in speaking English?
2. What strategies are used by them to overcome the difficulties in speaking English?

3.2. Research Design

This study used a descriptive qualitative method to obtain the data and to answer the research questions. This method was used because this study was addressed to certain situation that actually happened to the subject of the study, which was speaking English difficulties encountered by 12th graders of software engineering (SE) programme and the strategies they used to overcome the difficulties. The finding of this study was explored using this method. This method proposes deep insight to tell the speaking issue encountered by the respondents (Maxwell, 1996 (as cited in Mayangta, 2013)). Through this method, the research questions were able to be answered by obtaining the data from the students' perspective by using questionnaire and interview. To get deeper data, the classroom observations were done. Since the data of this study would be described by using words rather than numbers, the descriptive qualitative method was the most appropriate one for this study.

3.3. Site and Respondents

This study was conducted at a vocational school in Bandung. The reasons of choosing this school were, first, because some previous studies (Yastutik, 2007; Arita, 2008; Juhana, 2011) were also conducted at secondary school. The second reason was because the researcher did teaching practical program at this school before, so it gave an easy access to conduct this study.

In order to get the necessary data, the amounts of 30 12th graders of software engineering (SE) programme were selected to be the respondents of this study. At first, this study chose 11th graders as the respondents, but since they had job practice that implemented from January-April 2015, the respondents changed into 12th graders. The consideration of choosing 12th graders is they may have more English knowledge compared to 10th graders. Another consideration to choose 12th graders of SE programme as the respondents is because after doing teaching practical program, it was found that the students still have difficulties in speaking English. Since the researcher knew them well, it gave more advantages because they would be more open-minded. Therefore, this class was chosen as the respondents of this study. The teacher who taught English in this class was asked personally to teach the materials that had been taught (only during the research). It was done to get the data needed.

3.4. Data Collection

The data were collected by using questionnaire, interview, and classroom observations. According to Maxwell (1996, as cited in Mayangta, 2013), the descriptive qualitative method is proposed deep insight to tell the issue encountered by the respondents. Therefore, the data were obtained from the students' perspective by using questionnaire and interview. To get deeper data, the classroom observations were done.

3.4.1. Instrumentations

The instrumentations used in this study were questionnaire, interview, and classroom observations. The definition of questionnaire, interview, and observation according to some experts; the reasons of using them; and how they used in this study are explained as follows.

3.4.1.1. *Questionnaire*

According to Key (1997), questionnaire is "a means of eliciting the feelings, beliefs, experiences, perceptions, or attitudes of some sample of individuals". *Cambridge Learner's Dictionary* defines questionnaire as "a set of questions asked of a large number of people to discover information about a subject". There are two types of questionnaire: closed or restricted form, and open or unrestricted form (Key, 1997). The closed form prescribes the range of responses which might be chosen by the respondents, meanwhile the open form allows the respondents to write the answer liberally without any limitations of response (Cohen et al., 2007). Key (1997) stated that the closed form is easy to be interpreted, tabulated, and summarized. Whereas the open form establishes greater depth of response. Both types of questionnaires were used in this study.

There were 2 parts of questionnaire in this study. The first part was meant to find out the difficulties in speaking English they encountered, whereas the second part was meant to seek their strategies used to overcome the difficulties. Both of them used two optional answers: 'yes' or 'no' and two open questions in case the students had different answer (Cohen, 2007) (see Appendix A). The questionnaire was written in *bahasa* Indonesia in order that the students would not misunderstand the statements written. In other words, for better understanding (DeRoche and Lahman, 2008 (as cited in Sudjasmara, 2013)).

The statements of the questionnaire was adapted from Brown (2001); Chen & He (2010); Huang (2010); Juhana (2011); Kondo & Yang (2004); Luu (2000); Oxford (1990); Smith (2011); Sperling (2008);

Thornbury (2005); Zhang (2004); Zhang (2006). The table below (table 3.1) explains the distribution of the statements on the questionnaire.

Table 3.1. The distribution of the statements on the questionnaire

No.	Category	Statement Number
1	Difficulties in speaking English related to linguistic factor encountered by the students	7, 8, 9
2	Difficulties in speaking English related to psychological factor encountered by the students	1, 2, 3, 4, 5, 6
3	Strategies used by the students to overcome the difficulties in speaking English related to linguistic factor	4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14
4	Strategies used by the students to overcome the difficulties in speaking English related to psychological factor	1, 2, 3

3.4.1.2. Interview

Kvale (1996, as cited in Cohen, 2007) stated interview as an inter-view. He defined it as "an interchange of views between two or more people on a topic of mutual interest, sees the centrality of human interaction for knowledge production, and emphasizes the social situatedness of research data" (p. 349). Dyer (1995, as cited in Cohen, 2007) remarked that interview is not the same as daily conversation. It has different 'rules of the game' where the researcher has done it by concerning study's needs.

The interview session was used to gather deeper data regarding the results from the questionnaire. It was done after distributing the questionnaire. As Gillham (2000), Ritchie & Lewis (2003) (as cited in Newton, 2010) stated that "face-to-face interviewing may be appropriate where depth of meaning is important and the research is primarily focused in gaining insight and understanding". Makcey and Gass (2005) added that "interviews can allow researchers to investigate phenomena that are not

directly observable, such as learners' self-reported perceptions or attitudes".

This study used a semi structured interview with total of 21 open-ended questions (see Appendix B) which was adapted from Sudjasmara (2013). A semi structured interview was aimed to understand respondents' perspective about specific subject (Sociology Organization). This study used open-ended questions in order that the respondents could answer by using their own words (Cohen, 2007). Despite of guiding questions made, new questions were allowed to be asked during interview to get more information from the respondents (Hatch, 2002 (as cited in Sudjasmara, 2013)). The respondents were interviewed in *bahasa* Indonesia to avoid misunderstanding in interpreting their meanings. The interview session was tape recorded. Each interview lasted about 5-10 minutes. The table below (table 3.2) explains the distribution of the questions in the interview.

Table 3.2. The distribution of the questions in the interview

No.	Category	Question Number
1	Difficulties in speaking English related to linguistic factor encountered by the students	3, 4, 5
2	Difficulties in speaking English related to psychological factor encountered by the students	2, 6, 7, 8, 9, 10
3	Strategies used by the students to overcome the difficulties in speaking English related to linguistic factor	13, 14, 15
4	Strategies used by the students to overcome the difficulties in speaking English related to psychological factor	16, 17, 18, 19, 20
5	General questions related to difficulties and strategies	1, 11, 12, 21

3.4.1.3. Classroom Observation

The classroom observation was used to get direct and actual information about the students' speaking difficulties, also to strengthen the results from the questionnaire and the interview. As Bailey (1994) stated that in the observation study, the researchers could recognize ongoing behavior and take note the most important features about it.

In this study, the researcher took the role as a non-participant observer. So, the researcher was only present at the location and did not interact with the students during classroom activities (Creswell, 1994). The classroom observation was meant to find out students' difficulties and their strategies to overcome the difficulties, during English class period. The classroom observation was done three times. It was recorded in 30 minutes for each observation. During classroom observation, the observer would be doing check-list on the observation sheet (see Appendix C).

The observation sheet contained two parts. The first part was to observe the students' speaking English difficulties and the second part was to observe the students' strategies to overcome the difficulties. Both of them used tally marks to count the students who had difficulties and used the strategies. The observation sheet was written in *bahasa* Indonesia so that would avoid misunderstanding, either when observing the students or interpreting the data. The observer also could write different difficulties and strategies in case they were not included on the observation sheet. The form of observation sheet is adapted from Thornbury (2005). The table below (table 3.3) explains the distribution of observed aspects on the observation sheet.

Table 3.3. The distribution of observed aspects on the observation sheet

No.	Observed Aspects	Part & Item Number
1	Difficulties in speaking English related to linguistic factor encountered by the students	Part I: number 7, 8, 9

2	Difficulties in speaking English related to psychological factor encountered by the students	Part I: number 1, 2, 3, 4, 5, 6
3	Strategies used by the students to overcome the difficulties in speaking English related to linguistic factor	Part II: number 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
4	Strategies used by the students to overcome the difficulties in speaking English related to psychological factor	Part II: number 1, 2

3.4.2. Procedure

The study went through a few steps in collecting the data. Miles and Huberman (1994, as cited in Sudjasmara, 2013) suggested several steps to analyze the data into qualitative descriptions: collecting the data from the field, categorizing the information, formatting the information into a story, and writing the qualitative text. Moreover, the data of this study were transcribed, categorized, analyzed, and explained.

3.4.2.1. Questionnaire

The first thing was giving the letter permission to do the research at the school to the vice head-master of the school. After getting the permission, it was continued by distributing the questionnaire to the 12th graders of software engineering (SE) programme at this school. Then, the data from the questionnaire were scored. Score 0 is for 'no' and score 1 is for 'yes' (Marion, 2004), continued by calculating the response frequencies. Afterward, the answers were categorized into several categories: difficulties in speaking English related to linguistic factor (DLF) and psychological factor (DPF), and strategies used to overcome the difficulties related to linguistic factor (SLF) and psychological factor (SPF) (Mai, 2008; Juhana, 2011; Sudjasmara, 2013). Later, the data were

explained from the most frequently appear to the most infrequent one (biggest to the least calculation) based on the each category. Finally, the answers of the questionnaire were explained into qualitative descriptions.

3.4.2.2. *Interview*

After explaining the results of the questionnaire, the next step was analyzing the data from interview sessions. Firstly, the recording of interview sessions was transcribed. After that, the next step is analyzing the interview data into two steps: categorizing and explaining. The interview data were categorized into the same categories as the questionnaire: difficulties in speaking English related to linguistic factor (DLF) and psychological factor (DPF), and strategies used to overcome the difficulties related to linguistic factor (SLF) and psychological factor (SPF) (Mai, 2008; Juhana, 2011; Sudjasmara, 2013). The last step is explaining the data from the most frequently appear to the most infrequent one (biggest to the least calculation) based on the each category. The data gained from the interview was used to support the result from questionnaire.

3.4.2.3. *Classroom Observation*

The data from classroom observations were analyzed descriptively. According to Creswell (1994), the data from qualitative study should be presented descriptively. Firstly, the recording of classroom observation was transcribed verbatim. Later, the videos of classroom observations and the transcription would be used to recall the important scenes observed. In other words, they were used to validate the data from the questionnaire, the interview, and the observation sheet.

Secondly, the data from the observation sheet was calculated. Part I and part II were summed from the total of tally marks of each number. The results from observation 1, 2, and 3 were categorized into several categories: difficulties in speaking English related to linguistic factor (DLF) and psychological factor (DPF), and strategies used to overcome the

difficulties related to linguistic factor (SLF) and psychological factor (SPF) (Mai, 2008; Juhana, 2011; Sudjasmara, 2013). Afterwards, the data from observation 1, 2, and 3 were summed to see the biggest calculation from each category. Lastly, the data were explained from the most frequently appear to the most infrequent one (biggest to the least calculation) based on the each category. The data from classroom observations was used to validate the data from the questionnaire and the interview. After analyzing the results of the questionnaire, interview, and classroom observations, the research questions are finally answered.