CHAPTER III

RESEARCH METHODOLOGY

This chapter presents how the current research is developed. This involves the research design, the research site and participants, the data collection, and the data analysis.

A. Research Design

This study is designed within qualitative approach since such approach is best suited with the main focus of this research that is on ESP teachers' perceptions about their students' needs. As Bell (2010) states, adopting qualitative perspective means that researchers are more concerned to understand individual's perception of the world. Berg (2007) expresses similar view, that qualitative research is a method allowing researchers to share the understandings and perceptions of others.

Specifically, this study falls into the category of case-study, as this study embodies some characteristics of a case study. Firstly, this study is designed to be carried out in a small scale and a single case (Creswell, 1994; Emilia, 2009). Secondly, this study does not attempt to generalize its findings (Alwasilah, 2009). Thirdly, this study aims to provide an in-depth description and analysis of a person or a social group by using multiple data sources (Heigham & Croker, 2009; and Malik & Hamied, 2014).Lastly, the analysis will include the examination of the person's experiences, roles, and motivations that affect his/her behavior in society (Berg, 2007).

The rationale presented above clearly justifies that this research is best to be carried out as a qualitative case study.

B. Research Site & Participants

The data for this study were collected from four English teachers teaching at one of vocational schools in Bandung, Indonesia. Since this study is to investigate the participants in their natural settings, the selection of the teachers was not based on any fixed or controlled criteria, but on their availability instead as the English teachers. It was expected that in doing so, the more valid data can be acquired. It is in line with Dornyei (2007) who states that qualitative inquiry is not concerned with how representative the respondent sample is, but rather with finding those that can provide rich and varied insight into the studied phenomenon.

There were initially only two teachers that were investigated, but since the other teachers were available during the day of interviews, they were also involved in the process to enrich the data. The teachers are given pseudonyms as to protect their personal information. They are: Martha (female), Ernie (male), Emmy (female), and Mona (female). Among all, Ernie is the youngest teacher in terms of total teaching experience. This is because he was a substitute teacher at the school. The other participants have been teaching for above ten years.

On the other hand, the school was chosen as the research setting because the researcher had access to the school, and it was more approachable both in terms of time, space, and the participants' availability. This reasoning is approved by Alwasilah (2009) who states that convenience factor should be included to support the researcher to carry out the research.

C. Data Collection

As a qualitative research, this study was carried out using qualitative instruments, which were questionnaire and semi-structured interview. The instruments were used for collecting data in relevance to the ESP teachers' beliefs and attitudes. They were also used for the purpose of triangulating the findings.

1. Questionnaire

Questionnaire was used for collecting data about teachers' beliefs about and attitudes towards students' needs. This instrument was chosen following the view shared by several researchers that "questionnaire is a written instrument consisting of questions to gather information regarding participants' knowledge, opinion, ideas, and experiences." (Wallace, 2001; Gray, 2004; Cohen et al., 2007; Dornyei & Taguchi, 2010).

The questionnaire is opened by an introduction. It contains the purpose of the questionnaire, the clarification that the participants' personal information are confidential, the statement that any of the answers provided by the participants will not be judged, altered, or misused, and the demand that the participants should provide their answers with full honesty and responsibility.

There are three parts of the questionnaire. The first part (part A) is about the participants' background information, which would be used for classifying the data. The second part (part B) consists of inquiries regarding factual situation of English teaching in the participants' school. This was expected to give insight into what the participants were truly dealing with, thus giving us prediction about what might shape their beliefs, attitudes, or decision makings. The third part (part C) consists of inquiries that use Likert scale to reveal teacher's beliefs and attitudes, since Likert scale is used for measuring attitude, opinion, and perception (Fraenkel and Wallen, 2007).

The inquiries in the third part were partially modified from the questionnaire developed by Moiinvaziri (2014) which was originally designed for students. For the purpose of this research, the questions were addressed to teachers instead. The questions in the third part are divided into six categories. Each of the categories is related to certain type of needs which are formulated by Hutchinson & Waters, namely target needs (necessities, lacks, and wants) and learning needs.

1) English language features→related to necessities, lacks, and wants.
2) English language skills→related to necessities, lacks, and wants.

3) The uses/benefits of English→ related to wants
4) Teachers' roles→related to learning needs
5) Students' learning strategies & styles→ related to learning needs
6) Teaching and learning activities→ related to learning needs

The author prepared the questionnaires in two languages; Indonesian and English (the questionnaires are attached in the appendix). The participants were given the freedom to choose either one of them, and their choice would not affect the analysis of the result. The questionnaires were distributed to only Martha and Ernie (pseudonyms) as they were the only available teachers at the time of the distribution. Both of them used the Indonesian version of the questionnaire. The data from the questionnaires were collected a week after they were distributed. The analysis followed shortly after. The questionnaire is attached as an appendix.

2. Semi-Structured Interview

Interview was necessary for this research to find information which could not be obtained through questionnaire (Creswell, 2008) or if the answers to the questions required confirmation right away. Interview also enabled the researcher to give follow-up questions and enabled the respondents to share their experience (Alwasilah, 2002).

As for the type of the interview, semi-structured interview was chosen due to its flexibility in which only the important points or the general ideas were used as the guide to interview the participants (Nunan, 1992: 149; Emilia, 2011). By using this type of interview, the researcher had control over the order of the questions but was still able to hold onto the standardized questions with the possibility of developing some probes to ensure the correct material is covered (Harrell & Bradley, 2009). Simply put, it combines some degree of control with some degree of freedom (Wallace, 2001).Therefore, the questions for the interview were used as the guide for the interview, and emerging questions were possible to be developed along the way.

The questions were formulated and developed from three categories:

1) The teachers' awareness of students' needs
2) The teachers' beliefs and attitudes towards students' target needs
3) The teachers' beliefs and attitudes towards students' learning needs

The complete questions can be found in the appendices.

The interview was conducted one-on-one in a special occasion that previously had been planned between the researcher and each of the participants. Therefore, the participants were not interviewed in the same time. However, the interviews took place on the same day. On the same day, the researcher was able to meet with the other teachers and they showed their willingness to be interviewed. Thus, two extra sessions of interviews were held on that day. All of the interviews were carried out in Indonesian for convenience purposes. The interviews were recorded using audio recorder from the researcher's phone.

D. Data Analysis and Interpretation

As a qualitative research, the data analysis is an ongoing process (Maxwell, 1992), meaning that data collection and analysis might be a simultaneous activity (Merriam, 1991). In fact, data analysis should be simultaneous in order to prevent the data being jeopardized by delay (Krueger, 1998) and because qualitative data constantly evolves (Anderson & Arsenault, 2005). Therefore, the data analysis in this research was done back and forth with the data collection.

As for the steps of the analysis and interpretation, this research adapted the steps suggested by Creswell (2009), even though the implementation was flexible depending on the situation of the research. The first step is organizing and preparing the data, in which all data will be organized in the computer. Specifically, the interview data will be transcribed, as transcribing taped recordings of the interview into written texts is the usual procedure for analysis (Kvale, 1996).

The second step is reading through all the data. The data will be read and given general senses or meanings. In doing so, the transcriptions of the interview will be analyzed and categorized to find central meaning of what the participants say which reveals the central themes (Laforest, 2009) based on the research questions.

The next step is coding. The general ideas that have been collected will be organized into segments of text before bringing meaning to information (Rossman & Rallis, 1998, p. 171; in Creswell, 2009, p.186). It involves breaking down the data into categories/labels/terms so that they can be tracked down, grouped, and linked in order to see the patterns they create. In this case, the researcher will use codes based on the emerging information from the participants (emerging codes).

After that the descriptions of setting, people, categories, or themes for analysis will be generated. Themes in this case are briefer statements rephrased from the longer statements consisting of the main sense of what is said (Kvale, 1996). This is followed by presenting the description and themes in a qualitative narrative, which is separated into parts with each part representing each research question. Finally, the interpretation of the meaning of each theme will be given. This will be done by connecting the findings to the theories from the theories.

Several instruments for data analysis were developed during the analysis process for the purpose of helping the researcher and connect the ideas better. They were in forms of tables. Several other techniques were also employed, such as reading the data on the left side of the laptop display and working on the analysis on the right side of the laptop display. The following figures are several instruments that the researcher developed for the analysis.

E. Research Stages

This research was carried out chronologically by following several stages. Those stages are: 1) administration stage, 2) introduction to the research site and participants, 3) data collection and analysis, 4) data interpretation and presentation.

The administration stage refers to the initial processes of accumulating all documents and regulations necessary for implementing the research in academic and legal fashion. This includes sending the research proposal to the researcher's faculty and receiving a letter of approval for continuing the research, among the other documents that may be of significance.

At the second stage, the researcher went to the research site. The researcher introduced himself to several members of the school, including the candidates of the research participants, the office staffs, and the head of the school. The researcher asked for permission to conduct a research involving the English teachers there. At this point, the researcher followed the school's regulations and processes of approving the research to be continued. Still at the same stage, the participants were chosen based on the recommendation from the members of the school and the teachers' availability. Directly after that, the researcher conducted a meeting with the participants to explain the research to them and to plan the schedule of the research that was convenient with the participants' own schedule. This stage was done in less than a week.

After everything had been set, the data collection began, starting with the distribution of questionnaire to the chosen participants. This was followed directly by the analysis of the data in the next day. The distribution of questionnaire and the analysis of questionnaire data were expected completed in one week. Next, the interview was conducted according to the schedule previously agreed with the participants. However, due to some circumstances, mostly that involving the accreditation process of the school which was being held, the interview sessions were held back several times. The interview was carried nevertheless on one day with the participants separately. Initially, the interview sessions were intended for only two of the English teachers from the school, but the other English teachers on that day were available and were willing to give their thoughts for the purpose of the project. Therefore, the additional sessions were held on the same day.

In that occasion, the researcher also asked for the lesson plans that previously were asked from the one of the initial participants. The analysis of the interview data began right after the data had been accumulated. This includes transcribing and coding the data using the instruments previously shown. Meanwhile, the analysis of the participants' lesson plans was done in-between. All of the processes at this stage were done in one week as well. The last stage was interpreting and presenting the data in qualitative fashion that came shortly after. All of the findings were triangulated to answer the two research questions.

The research stages are simplified in the table below.

Table 3.2.

Stages of the current research

Stage	Week	Activities
Administration stage & Introduction to research site	Week 1	Completing all necessary administration Introduction with the members of the school Choosing research participants Planning the schedule with the participants
Data collection & analysis	Week 2	Distributing questionnaire Analysis of questionnaire data
	Week 3	Interviews with the participants Transcribing interview data Coding interview data
	Week 4	Member checking with the participants
Data interpretation & presentation	Week 5	Interpreting data
	Week 6	Interpreting data
	Week 7	Presenting data

F. Reliability and Validity

According to Gibbs (2007; in Creswell, 2009), the reliability of a qualitative research indicates the consistency in the researcher's approach across different researchers and different projects. He provides several procedures to meet qualitative reliability, which this study adopts. The procedures are simplified as follow:

1) Check transcripts to make sure they do not contain obvious mistakes.
2) Make the meaning/definition of codes consistent.
3) Cross-check codes developed by different researchers to call the agreement between the developers ("intercoder agreement" as called by Creswell).

Meanwhile, the validity of qualitative research is the accuracy of the research findings from the standpoint of the researcher, the participant, and the readers/audience of the research (Creswell & Miller, 2000; in Creswell, 2009). To accomplish such accuracy, this study will employ some validity strategies that Creswell (2009) lists, which are:

1) **Triangulation**. This strategy allows the themes emerged from the analysis to be justified by examining evidence from different data sources. Using this strategy is necessary in a case study, since a case study research relies on multiple sources of evidence which will enable the converging of the data (Malik & Hamied, 2014) in order to confirm the emerging findings (Merriam, 1998). That way, the bias of the data limited in one method can be reduced (Alwasilah, 2002) and the data will be valid and reliable (Maxwell, 1996; Alwasilah, 2011; and Silverman, 2012).
2) **Member checking**. This strategy needs the final data interpretation to be checked by the participants to see if the interpretation agrees with what they truly felt or intended. By using this strategy, misunderstanding during interview can be prevented and the participants' perspective can be confirmed on the ongoing process (Alwasilah, 2002).

In the case of the current study's researcher, the validity of the research is also be provided by actively discussing the findings with the supervisor of the research. This was done throughout the project, especially when the data have been accumulated.

G. Concluding Remarks

This chapter has presented how the research is designed to fulfill the aims of the research. This includes the research paradigm as a qualitative case study, the techniques for data collection, the data analysis and interpretation, and the validity and reliability of the research.