CHAPTER III
RESEARCH METHODOLOGY

3.1 Introduction

In order to produce information of a particular research problem, every research undertaking entails appropriate research methodology which can take the form of principled procedure. This systematic procedure guides the researcher to acquire and logically analyze the intended information (data) to attain specific research findings of the problem being investigated. Likewise, this study also requires a suitable research method to facilitate the conduct of investigation on teachers' beliefs about English teaching and learning. To this end, this chapter provides an overview of the research methodology selected for this study and the rationale for the choices made.

This chapter comprises five major sections. The first section presents a general overview of the methodology adopted in this study, and the second one describes the research sites and participants involved. The third section elaborates on how the study was planned to attain its particular purpose. Afterward, the phases of data collection and analyses are explained in the subsequent sections.

3.2 Overview of the Methodology

This study is descriptive (non-experimental) in nature. It attempts to find out certain variables that are not easily identified or too embedded in the phenomenon to be extracted for study—teachers' beliefs about English teaching and learning. No manipulation or treatments of subjects was devised in this study—the variables were characterized as they were.

In this non-experimental study, the data were collected by employing a cross-sectional survey research design. That is, by administering a set of self-administered questionnaire consisting of fifty-seven questions that provide direct quotations. In order to establish the whole picture of the findings, the data gained were analyzed by highlighting units of meaning that entails establishing themes to reveal categories using different symbols and colored highlighters. Afterwards, each coming up categories was accounted into percentages.
3.3 Research Sites and Participants

This study involved a total population of fifteen Junior High Schools in Sukabumi. This level of schooling was chosen because it is the first level of education where English has been officially taught and, therefore, English teaching at this level can hold decisive impacts on students’ further learning. In addition, logistically speaking, these schools were relatively easier to access because the researcher was one of the English teachers.

The total school population, represented by forty-two teachers of English, was taken as the participating teachers of the study. This decision was made to ensure that the data reflect a full picture of the condition. These participating teachers were non-native teachers of English. The majority of these teachers were female (61.90%) and the rest of them were male (38.10%). Most of them hold an undergraduate level of education as their highest degree (90.48%), or had Diploma 1 (2.38%) and Diploma 3 (2.38%). They were majoring in English Education. Meanwhile, the remaining two respondents hold an S1 from different major of educational background (4.76%): one majored in Mechanical Engineering and the other majored in Management.

In addition, the majority of the teachers reported that they had never taken any additional English course (83.33%), while the rest did (16.67%). Moreover, they varied greatly in terms of age and the length of their teaching experiences. The following tables present the breakdown of the participants by age and the length of their teaching experience.

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;31</td>
<td>13</td>
<td>30.95%</td>
</tr>
<tr>
<td>31-40</td>
<td>10</td>
<td>23.81%</td>
</tr>
<tr>
<td>41-50</td>
<td>14</td>
<td>33.33%</td>
</tr>
<tr>
<td>&gt;50</td>
<td>5</td>
<td>11.91%</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3.1 Participants by Age

<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th>Number of participants</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;6 years</td>
<td>8</td>
<td>19.05%</td>
</tr>
<tr>
<td>6-15 years</td>
<td>14</td>
<td>33.33%</td>
</tr>
<tr>
<td>16-25 years</td>
<td>18</td>
<td>42.86%</td>
</tr>
<tr>
<td>&gt;25 years</td>
<td>2</td>
<td>4.76%</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3.2 Participants by Length of Their Teaching Experience
With letters of reference from UPI and Sukabumi Municipality Office of Ministry of National Education, access to the schools was obtained from each school principal of the participating schools. After some contacts were made with the principals, thorough discussion related to the study was then carried out with the English teachers.

3.4 Research Design

In order to collect, organize, and integrate the data, this study employed a cross-sectional survey as its research design. This research design was employed because of the nature of the research questions as well as the scope of the study that involved a total number of populations of a relatively large geographic area (Merriam and Simpson, 1989; Merriam, 1991; Fowler, 1995; Scheuren, 2000; Trochim, 2001; McMillan and Schumacher, 2001; Walonick, 2004; Connor, 2006; Coe, 2006).

Moreover, the fundamental idea behind a survey design is compatible with this study. That is, to investigate variables by asking people questions related to their attitude or patterns of firsthand experiences at one point in time (namely: what they have done, their current situations, their feelings and perceptions) and to examine the relationships among the variables afterward.

Nevertheless, as with other research design, survey research design suffers from inherent weaknesses such as reactivity, low response rates, inability to probe more detailed information from the respondents, and the originality of the responses (whether the responses stated in the questionnaire were truly the respondents’ or somebody else). In general, these factors may affect the quality as well as the validity of the findings of the study. Therefore, some anticipatory measures had been done to work out these problems before the survey was done, as explained in the following data collection.

3.5 Data Collection

In order to collect the necessary data, the researcher administered a written questionnaire to the respondents (see appendix 1). This instrument was chosen essentially for two reasons. Particularly, because the questionnaire is a very effective way to gain data from a big number of participants like in this study and because it is less intrusive than any other data collection methods (such as telephone or face-to-face surveys)—the participants were free to answer the questions on their own timetable.
To be precise, the following sub-sections provide more information concerning the questionnaire and its' delivery and collection. These explanations include the justification of the decisions made, which at the same time explain the efforts made to tackle some commonly occurring problems as mention earlier.

3.5.1 The Questionnaire

The questionnaire utilized in this study comprises fifty-seven questions. All of these questions were developed based on the research questions that had been composed based on theories (through careful writing, editing, reviewing, and rewriting). In order to probe detailed information, most of the questions were open-ended and few of them were closed ones. According to Fowler (1995), asking open-ended questions is among the best ways to increase response, especially to measure complex matter—beliefs. He emphasized that although the measurement result may not be as easy to work with; participants like to answer some questions in their own words.

Furthermore, to confirm the validity of their responses, some questions were developed with a specific function to intentionally check the participants' consistence. Besides, because this study applied no other data gaining processes, some sub-questions investigating the "how" and "why" related to certain main questions were given in order to get more information and to verify their responses.

Triggered by theories related to beliefs, which emphasized experience as the main source of beliefs, and theories concerning the importance of doing teaching reflection, the questionnaire administered in this study was deliberately developed in the form of self-reflection. In addition to its specific uses to investigate the participants' beliefs about English teaching and learning, this format was set up to reduce participants' reluctance to answer the questions, which may cause a high rate of non-response, and to ensure that the returned questionnaires had been answered by the same participants she sent the questionnaires to.

Within the questionnaire, the participants were guided systematically to honestly give their responses, which would preclude them from getting somebody else to do it for them. The format is almost similar to a guided-short story that they were expected to fill it with enjoyment. Moreover, the wordings of the questions were also set up in this format using simple words, so that the participants would answer the questions as naturally as they were telling their experience orally.
The questions in the questionnaire were presented in a chronological order based on their experience—starting from their English learning experience as students up to their current experience as teachers. To probe more insightful information, a relatively ample white-lined space was provided in every question, although several questions were closed questions. Moreover, in order that all the participants would understand the questions in the same way, some stated instructions were provided and certain crucial words in each item of questions were typed in italics and bold. Besides, all the questions were presented in Indonesian.

Furthermore, to reduce participants' hesitation and stress that might occur when they answered the questionnaire, the questionnaire was given an attractive title: "This is my experience during my teaching and learning English." This title was as well stated to set the participants' stances that they were not going to be evaluated, instead they were required to share some of their prestigious experience concerning English teaching and learning since they were students up to their current experience as English teachers, which treasure their beliefs about English teaching and learning.

Basically, the questionnaire was divided into three logically interrelated sections. Each of the sections covered a specific topic. Particularly, the participants' English learning experience as they were students (12 questions), their commitment to become teachers (19 questions), and their current daily teaching activities (26 questions). In every transition of the sections, some short statements that were purposively given to mainly attract participants' attention and motivation to answer the questions were provided. Besides, these statements also maintain the questionnaire external appearance as a reflection.

Similar to any questionnaire in general, a pre-notification letter was attached on the first page of the questionnaire in order to establish the legitimacy of the survey. Within this letter, a brief description of why the study was being done, why the participants should complete the questionnaire, how the results would be used, and its "confidentiality" was stated.

In addition, to improve the questionnaire as well as to assure a successful survey, the questionnaire was sent out as a test to a small number of people. Most of all, advisors' suggestions were taken into consideration during the questionnaire designing process.
3.5.2 The Questionnaire Delivery and Collection

Questionnaire sets were delivered personally to every respondent based on an appointment. This was done to facilitate personal contact with the respondents and to ensure that they understand what they have to do. Within this step, clarification related to the questionnaire and the submission date of the questionnaire was discussed.

About three weeks afterward, the questionnaires were then collected. In this phase, some interviews to clarify the participants’ responses (both through further self-visited and via phone) were done. Through this process, all the forty-two sets of questionnaires were successfully collected with the necessary information. Overall, the whole process of questionnaire delivery and collection took two months.

3.6 Data Analyses

The following steps are the process of data analyses the researchers used to analyze the data gained from the questionnaire.

1. Assign a number (as an identity) to every respondent.

2. Type responses under each question consistent with the identification number of the respondents (as exemplified in appendix 3)—this resulted 70 sets of data. This typing process was done to file the raw data, to make the data more user-friendly and to make the analyses easier. Besides, this procedure made the verification of participants’ consistency possible. It also made more straightforward the process of data analyses of every response and across responses of a question as well as across questions under the same issue and across issues.

3. Read each data set repeatedly and identify recurring topics by highlighting the keywords stated on each response using kinds of symbol (e.g. *, □) and colorful highlighters. In some cases, especially in analyzing closed questions, the process were easier because the questions had directly provided the themes (such as important/not that important/unimportant) in which the data could be put into nominal-level categories right after applying the themes into the responses.

4. Organize recurring topics coming from each data set into themes relevant to items of the questions in the questionnaire.

5. Rearrange recurring themes into categories (per data set), for example: language aspects, language skills, etc.
6. Copy the categories into a separate list of items complimented with number of respondents. This procedure made possible the calculation of each category into percentages.

7. Organize data sets (which have been converted into categories and percentages) based on corresponding research questions. Because all research questions required information from many different items of questions, references was made to "maps of questions" (see appendix 4) already prepared beforehand. In this way, all related information items could be put together. From this grouping, formulation of finding for each research question became possible.

8. Reformulate the (big number of) categories in each group of data set into fewer bigger categories—there are four groups of data sets, including data sets about teachers’ beliefs about English, about learning English, teaching English, and about the teachers’ job.

9. Formulate a statement of generalization based on the final categories organized under each research question.

In brief, the procedure of data analyses is described in the following figure.
Figure 3.1 Data Analyses Procedures

1. Assign an identity to every respondent using number
2. Type respondents' responses in order
3. Read each typed data set repeatedly and identify recurring topics
4. Organize recurring topics coming from each data set into themes
5. Rearrange recurring themes into categories
6. Copy the categories into a separate list of items complemented with number of respondents
7. Organize data sets (which have been converted into categories and percentages) based on corresponding research questions
8. Reformulate the categories in each group of data set into fewer bigger categories
9. Formulate a statement of generalization based on the final categories organized under each research question