

CHAPTER III

RESEARCH METHOD

This chapter presents a detailed description of the methodological approach of this research. It begins with an overview of the study, the research design, research setting, research participants, data collection procedures, instruments of the study, and data analysis.

3.1 Research Design

For teacher cognition investigation, the research literature suggests that there is a wide range of instruments and techniques to elicit teachers' thoughts and concern about teaching and learning. The instruments include journals, questionnaires, concept maps, stimulated recalls, interviews, practical arguments, short-answer tests, repertory grids, metaphors, picture-drawing on story-lines, and conversations (Beijaard, van Driel, & Verloop, 1999; Black & Walliwell, 2000; Kagan, 1990; Meijer et al, 1999).

According to Borg (2003), the different kinds of evidence are likely to reflect different assumptions about the nature of teacher cognition. Self-report instruments are based on an assumption that beliefs can be rated against predefined propositional statements and not necessarily related to classroom practices. Interviews reflect the view that beliefs can be articulated orally as teachers are aware of the beliefs that they are holding as well as being able to provide verbal accounts of the cognition underpinning their work.

Both self-report instruments and interviews may generate data which reflect teachers' ideals, but concrete examples of real practices may not be referred to. Obtaining data from classroom events may more efficiently capture teachers' cognition in relation to actual practices. Barcelos (2003) and Borg (2003) suggest that using a combination of different research approaches to study teachers' cognition and beliefs may result in revealing different dimensions of teachers' thinking towards particular actions or concepts and may counteract the limitations of using one individual strategy.

Based on the purposes and theoretical frameworks of the research, this research was designed to employ mixed-method approaches in order to interpret or explain the result gained through different research instruments. Based on the notion of method triangulation as a means for seeking convergence across qualitative and quantitative methods (Patton, 1990), integrating the different methods is likely to produce better results in terms of quality and scope.

Mixed-method inquiry is usually associated with field methods, such as observations and interviews, combined with traditional surveys. The results from one of these methods can help identify particular groups of participants for further study or potential questions to ask for the other method (Tasshakkori & Teddlie, 1998), while different types of data are also useful to “generate deeper and broader insight, to develop important knowledge claims that respect a wider range of interests and perspectives” (Greene et al., 1997, p. 7). This aspect of mixed-method inquiry is a significant advantage for researchers because it can “expand the scope of, and deepen their insight from their studies” which can reflect upon better understanding (Sandelowski, 2000, p. 246). In addition, it is accountable to broader audience such as teachers, student teachers, educators, and teacher researchers as different types and levels of data are generated (Cresswell & Clark, 2006).

In order to apply the theoretical frameworks and different methods, this study adapted the concurrent transformative strategy proposed by Creswell (2003). According to this strategy, theoretical perspectives are used as lenses to guide the choices of methods that best facilitate the inquiry (see Figure 3.1). Quantitative and qualitative data are collected simultaneously and may have equal or unequal priority. The data from both qualitative and quantitative sources are integrated most often during the analysis phase; however, integration during the interpretation phase is also possible.

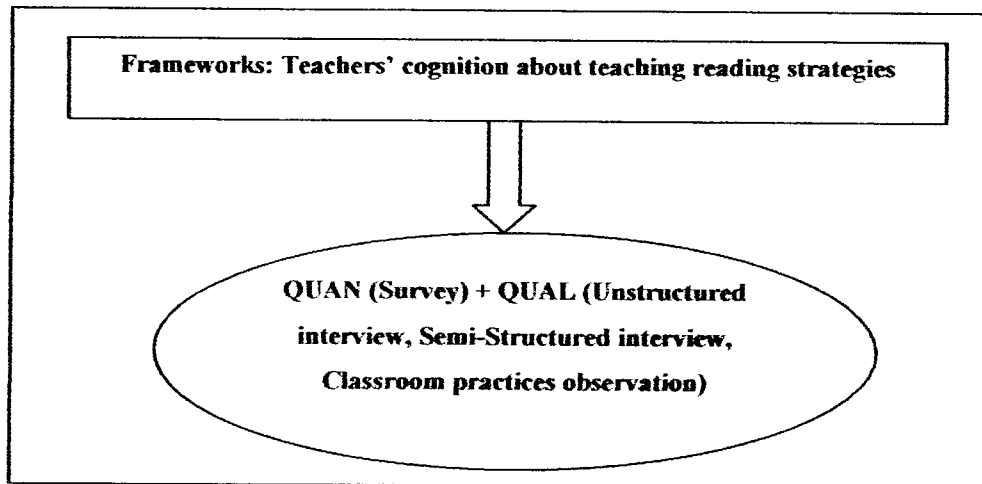


Figure 3.1 Concurrent Transformative Designs Adapted from Creswell (2003)

Following this design, this study investigated teachers' cognition about teaching reading strategies and their classroom practices. Qualitative data from interviews and observations took priority, while quantitative data from the survey were embedded to offer a broader perspective on the findings. The strategy of inquiry used in the quantitative part of the study was a survey, whereas inquiry strategies applied in the qualitative part were unstructured interviews, semi-structured interviews, and participant observations. Therefore, data collection strategies generated both numerical and narrative data that supported similar questions. For instance, the study involved asking participants to complete closed-ended questions asking about teaching reading strategies, while at the same time interviewing some participants about the same questions using an interview protocol with an open-ended format. This strategy allowed the researcher to analyze the numerical data and the narrative data from the interviews as well as to look for instances of agreement and disagreement between the two data sources – as stated by Tasshakkori & Teddlie (1998).

3.2 Research Setting and Participants

3.2.1 Research Setting

The study was carried out with four EFL teachers at one model junior high school in Bandung. The school was chosen as the setting of the study because it was easy to get the access and communicate with the participants involved in this study. The main research started on February 2013 when a survey questionnaire about teachers' cognition was administered to thirty participants. Thereafter, semi structured interview, unstructured interview, and classroom observation were done with the teachers who had agreed to be interviewed and observed on April 2013.

3.2.2 Research Participants

There were thirty teachers who participated in the study. The majority of these teachers came from junior high schools in Bandung West Java. They have been teaching English more than ten years. The main participants of this research were four English teachers at one model junior high school in Bandung. The average teaching experience of the participants was 18.1 years. The participating teachers in this study did not, as stated by Cohen, Manion, and Marrison (2007, p. 104), "represent the wider population" of secondary EFL teachers in Indonesia, so that the findings from this study were not applicable for any generalization to be made as they presented the particular perspectives of these participating teachers.

The followings are the personal information of the participants.

1. Teacher A

Teacher A is a 48 years old female. She had a master's degree and had been teaching English for 27 years. She had never had other jobs except teaching English. She had an excellent graduation rank. She had participated kinds of workshops about teaching English as a foreign language, either in national or international level.

2. Teacher B

Teacher B is a 44 years old female. She had a master's degree and had been teaching English for 16 years. She had never had other jobs except

teaching English. She had a good graduation rank. She had participated kinds of workshops about teaching English as a foreign language, either in national or international level.

3. Teacher C

Teacher C is a 41 years old female. She had a bachelor's degree and had been teaching English for 17 years. She had never had other jobs except teaching English. She had a good graduation rank. She had participated kinds of workshops about teaching English as a foreign language, either in national or international level.

4. Teacher D

Teacher D is a 35 years old female. She had a bachelor's degree and had been teaching English for 12 years. She had never had other jobs except teaching English. She had a very good graduation rank. She had participated kinds of workshops about teaching English as a foreign language, either in national or international level.

3.3 Data Collection Procedure

The data were collected during February - April 2013. Before starting the data collection phase, the researcher contacted thirty EFL teachers who have teaching experience more than ten years by phone and face to face conversation, inquiring whether they would like to participate in the study. Responses from thirty EFL teachers were received. Then, the researcher started distributing the questionnaires to them directly and all thirty of these were later returned. As questionnaires were returned, the researcher conducted a meeting with four EFL teachers as the main participants of this study to give more detailed information about their actual practice of teaching to arrange the interviews. Each interview took for about 50 minutes, and all interviews were conducted in Bahasa Indonesia and audio-recorded.

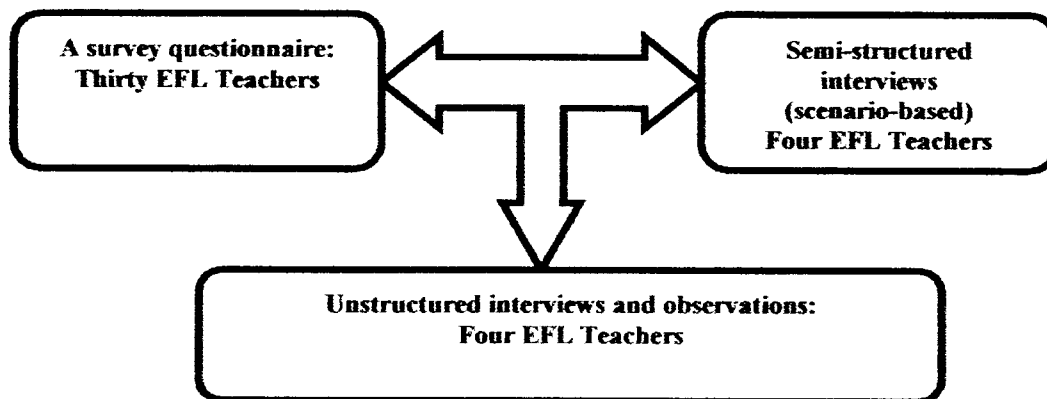


Figure 3.2 Data Collection Procedure

3.4 Instruments of the Study

3.4.1 Questionnaire

Questionnaire is a document that asks the same questions of all individuals in the sample and respondents record a written or typed response to each questionnaire item. Also, the respondents typically control the data collection process by filling out the questionnaire at their convenience, answering the items in any order, and taking more than one sitting to complete it, making marginal comments, or skipping questions (Borg, 2003: 222).

This instrument was used for collecting the required data with regard to background information and 27 items with 5 point Likert scale. The items were used for surveying and collecting teachers' cognition about the definition of reading strategies, the importance of teaching reading strategies, and teaching practice about reading strategies. The questionnaire was developed by the researcher on the basis of research questions of this study and the existing literature on teachers' cognition about teaching reading strategies.

The researcher constructed the questionnaire regarding teaching reading strategies using the framework of O'Malley and Chamot (1990) that there are three major types of strategies, named as *metacognitive*, *cognitive*, and *social affective*, as a guideline in organizing questionnaire.

3.4.2 Interview

Interviewing is a way to collect data as well as to gain knowledge from individuals. It is 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 situations of research data. It does not simply concern collecting data about life; it is a part of life itself and it has its own issues and complexities and demands its own type of rigour (Kvale, 1996; Cohen, Manion and Morrison, 2002: 267, O' Leary, 2004: 162). Moreover, interview attains highly personalized data, requiring for probe and it is conducted to make sure that the respondents have a clear idea of why they have been asked about the issue and what the basic information about the purposes of the research (Gray, 2004:214; Grillham, 2000:38).

In designing the interview questions, the researcher first assumed that the teachers' knowledge and beliefs could be best characterized as personal or tacit rather than propositional in the form (Feiman-Nemser & Flooden, 1983). Personal knowledge is more likely stored and reported in the form of stories and incidents (Smith, Edelsky, Draper, Rottenberg, & Cherland, 1991). The researcher further assumed that such personal knowledge is best ascertained through soliciting examples and stories from teachers and then inferring knowledge and beliefs from this case knowledge (Richardson, Anders, Tidwell & Lloyd, 1991; Smith & Shepard, 1988). Informal and clinical interviewing methods (McCracken, 1998; Polkinghom, 1988) are best suited to these principles about the nature of teachers' cognition and the ways to elicit them.

There were two types of interviews used in this study: the semi-structured interview and unstructured interview or informal conversational interview (Patton, 2002, p. 342). All the interviews in this study were conducted in Bahasa Indonesia. Conversational interview techniques were used with the key informants because this study focused on the deep meaning of teachers' knowledge and perceptions regarding reading strategies and teaching reading strategies in the classroom.

3.4.2.1 Semi-structured Interview

A semi-structured interview was constructed to use in this study to examine and probe teachers' cognition about reading strategies and teaching reading strategies. Since semi-structured interviews are non-standardized and are frequently used in qualitative analysis, the interviewer did not do the research to test a specific hypothesis and was free to conduct the conversation as she thought fit, ask the questions she deemed appropriate in the words, and ask for the clarification if the answer was not clear – as mentioned by David & Sutton (2004: 87); Corbetta (2003: 270).

One of the main issues in teachers' cognition research was asking teachers to expose or critique their personal beliefs about what they usually do in the classroom and their teaching profession. Previous studies have suggested that teachers might feel uncomfortable when being questioned about their teaching beliefs and practices; therefore, their responses might not reflect their own beliefs (Kagan, 1990; Murphy, 2000). Regarding this case, researchers were required to find ways and strategies to help teachers feel comfortable to express their deep thoughts and beliefs. To counter this research challenge, semi-structured interviews with scenario prompts were conducted in this study. As semi-structured interview could be used both to give and receive information, the scenarios, which also appeared in the survey questionnaire, were incorporated as prompts to point participants' thoughts and instances towards a particular technology use.

3.4.2.2 Unstructured Interviews

According to Creswell (2003) and Fontana and Frey (2000), this type of interview is conversational and no predetermined questions are asked in order to remain as open and adaptable as possible to the interviewee's nature. This approach offers maximum flexibility to ask spontaneous questions depending on individual differences and situational changes. Interview questions can be adjusted according to participants' elaborations. Therefore, preceding interviews help in "constructing a more robust

investigation in the succeeding one” (Patton, 2002, p. 342). In addition, the conversational talk usually creates a relaxed atmosphere for both the researcher and participants who may find it easy to share personal and professional values about the topics covered.

Nevertheless, this does not mean that conversational interviews in this study were unfocused. The concepts and purposes of the study were still maintained by means of an interview guide (see Appendix). As Patton (2002) suggests, on any given topic, it is possible to ask any of six main types of question focusing on: experience and behavior, opinions and values, feelings, knowledge, sensory information, or even what the interviewer would have seen or heard if the participant had views or experience of the phenomenon. Therefore, the researcher adopted the types of questions suggested above as a guideline for the interviews.

The unstructured interviews were conducted with four EFL teachers who had indicated willingness to give more information about their personal practices. Before the interview was conducted, the researcher initiated contact with them and talked via telephone. Then, the researcher requested to visit their institutions during their working hours for interviews and observations.

To start the interview, the researcher introduced herself as a teacher researcher asking for an opportunity to share ideas about reading strategies and teaching reading strategies in EFL classroom teaching. The participants were informed about the research objectives and data collecting protocol. They were asked about their general knowledge with regards to the meaning of reading strategies, importance of reading strategies, and their practices in the classroom. Each interview took more than forty-five minutes as the participants were encouraged to talk freely and clarify their views on particular topics. In addition, the researcher took notes and audio-recorded each interview. After that, each interview was transcribed and summarized for the participants to review and add comments. All data were transcribed by the researcher immediately after each interview.

3.4.3 Observation

Another method for data collection used in this study was class observation. Observation is the process of gathering open-ended, first hand information by observing people and places at a research site (Creswell, 2008: 221). This instrument was used to find out teachers classroom practices in teaching reading strategies to their students. The researcher observed teaching learning activities in the classroom and did not take part in any classroom activities. Frankel & Wallen (1996: 452) states that the researcher makes no effort whatsoever to manipulate variables or to control the activities of individuals, but simply observes and records what happens as things naturally occur. Additionally, in this study, class observation was used to crosscheck the extent to which the teachers' cognition actually presented in their classroom practices. The researcher check listed and identified teachers' practice in the classroom. Besides, the process of classroom practices was taped using video tape recorder.

3.5 Data Analysis

The quantitative and qualitative data were collected. Questionnaires were for the collection of quantitative data, while interview and observation were for collection of qualitative data. The qualitative data was imperative since it could enrich the study as a whole and additionally, functioned as a way to crosscheck and validate the data collected.

3.5.1 Quantitative data analysis

The answers to the questionnaire items which included checklist and five-point Likert-type scale items were assigned in numerical values. Descriptive statistics (percentages and mean scores,) were formulated to summarize and present that data. Frequency and descriptive statistics, tables, and figures were constructed to display results with respect to the research questions of this study.

3.5.2 Qualitative data analysis

Qualitative data analysis involves continual reflection upon the data, making sense out of text data, and making interpretations about the larger meaning of the data. It requires asking general questions and developing an analysis from the information. Researchers need to tailor the data analysis into specific types of qualitative research strategies (Creswell, 2003). Since the major qualitative data in this study were interview accounts, they were subjected to content analysis which involved coding and categorizing the data. In this respect, Cohen et al (2007) suggest that content analysis involves not only coding and creating meaningful categories, but also comparing and making links between data, and drawing theoretical conclusion from the text.

The researcher started the data analysis by reading all the open-ended answers, listening to all the recordings, and transcribing the accounts into text form. In order to obtain a general sense of the data, the researcher read through all the transcriptions, took notes, and wrote general thoughts about the data. The data and related materials were reviewed and reorganized for the preliminary coding. At this stage, the researcher went through several interview accounts and written answers, clustered related data together, and labeled each cluster according to its characteristics (e.g. teachers' knowledge of reading strategies, importance of reading strategies, and teaching reading strategies in the classroom).

After primary categories were developed, the researcher looked for similar or closely related categories which could be clustered together under a broader label. At this time, it was found that some specific extracts could be linked to the already formed broader categories and some new categories emerged.

However, some answers and interview extracts about issues, such as class size and restrictions of the curriculum, were not yet assigned to any of the existing categories. Dornyei (2007) suggests that the revision of the code can be done by going back to the original transcripts and recoding according to the new categories. If the majority of the extracts fit the new system, this can be seen as a

sign of the validity of the code. Therefore, the researcher looked into the categories and regrouped them as well as created new categories.

The next step of the data analysis was arranging the coded data into themes for analysis. The themes were analyzed, segmented into smaller parts, and supported by evidence from multiple sources. Aspects of teachers' understanding, knowledge, beliefs, and perceptions about reading strategies, importance of reading strategies, and teaching reading strategies were considered.

3.6 Chapter Summary

This chapter describes the method of the study which is related to the research design. This study was intended to investigate teachers' cognition about reading strategies, teaching reading strategies, and the teachers' classroom practice in a model junior high school in Bandung as stated in chapter I. The description in this chapter focuses on research setting, research participants, research design, data collection procedure, instruments of the study, and data analysis.