

## **CHAPTER 3**

### **METHODOLOGY**

This chapter discusses the research methodology that the researcher used in this study. It consists of four sections; research design, site and participants, data collection, and data analysis techniques.

#### **3.1 Research Design**

The purpose of this study was to describe and identify the effectiveness of implementation of teaching multimodal text using genre-based approach. This study was conducted in order to answer the following research questions; 1) can multimodal texts, especially photographs, be implemented to teach writing using genre-based approach?; 2) how can multimodal texts, especially photographs, help to improve the students' writing ability using genre-based approach?; and 3) what are the students' opinions toward teaching writing using multimodal texts, especially photographs, in developing their writing ability?

This study employed a qualitative approach to gain the data collection and data analysis. The study has a characteristic of a case study for four reasons. First, the study was aimed to provide an investigation in real situation of students' behavior in the teaching program and their writing ability toward multimodal text to develop students' writing competency (Nunan, 1992, p. 74; McMillan & Schumacher, 2001, p. 398; Cohen, Manion, & Morrison, 2013; p. 253). Second, the study did not formulate any hypothesis and seek to test it, but the study analyzed the situation of such phenomena rather than develop theory which is also otherwise case study features (Creswell, 2003; Cohen et al., 2013). Therefore, the result of the study was not attempted to generalize beyond different case & setting. Third, the study developed in depth of a small group of participants (Creswell, 2003, p. 13; Marshall & Rossman, 2006, p. 55; Holliday, 2007, p. 18; Silverman, 2013, p. 126;). And forth, multiple data collections are aimed at

enhancing the validity and effectiveness of the teaching program (McMillan & Schumacher, 2001, p. 398; Cohen et al., 2013, p. 253). Specifically, the study was to examine a particular case to give an insight into an issue on the use of photo as multimodal text in teaching writing. Furthermore, the result of the study is expected to contribute to setting policy and professional practice (Liamputtong, 2009, p. 192).

### **3.2 Research Site and Participants**

This study was conducted to second grade students in one public junior high school in Bandung. To choose the participant of the study, the purposive sampling was employed for a feature of qualitative research ( McMillan & Schumacher, 2001, p. 400; Cohen et al., 2013, p. 114). There were three participants in the study; each of them was from high, middle, and low achiever students. The data of high, middle, and low achiever was based on the diagnostic writing that was held firstly before the teaching cycle. The participants were observed during the teaching stage to recognize their ability in writing. This scheme was based on the theory that qualitative research depends on the specific setting and phenomena which will be studied (Maxwell, 2012; p. 69). To access the successful study, technically the research setting should achieve the things which are needed to answer the research questions.

### **3.3 Data Collection Techniques**

This section discussed about two main part; instrumentation, and procedures of data collection techniques.

#### **3.3.1 Instrumentation**

The study employed four types of instruments including students' writing documents, classroom observations, questionnaires and interviews. The triangulation of two or more methods of data collection was needed in order to make the research findings more reliable (Wallace, 1998; 36; Liamputtong, 2009, p. 26; Cohen et al., 2013, p. 141). It was to find the regularities in the data in

which the researcher compared different sources, situations, and methods to see whether the same pattern kept recurring (McMillan & Schumacher, 2001, p. 478). Either, it reduced the risk that the findings reflected only systematic biases or limitations of a specific method. So it allowed gaining a better assessment of the validity (Maxwell, 2012, p. 93).

### **3.3.1.1 Classroom Observation**

Classroom observations were conducted to capture a clear picture of each activity. Observation methods offer actual evidence by systematic documentation of participant in teaching cycle (Hyland, 2009). In this study the researcher contributed as the teacher and acted as participant observer of the study. Immersion in the setting permits the researcher to hear, to see, and to experience reality in natural setting (Marshall & Rossman, 2006).

The observations were done in eight meeting. It was started from the first meeting to the end of teaching program. The researcher recorded the activity in the classroom. The observation records were referred to as field notes. Field notes describes detail, nonjudgmental, and concrete descriptions of what happened in the setting. It was written immediately after each session because the memory of observation is still fresh (Van Lier, 1996). Field notes focused on both students and teacher have been said and one in the interactional setting (Liamputtong, 2009).

### **3.3.1.2 Students' Writing**

A major source of data for writing research is writing itself (Hyland, 2013). Therefore, students' document analysis is important to see the development of their writing skills (Freebody in Emilia, 2011). The document was students writing in recount text using photos as multimodal text. There were six texts that were analyzed in the study. Three of them were text in diagnostic test, and others were from independent construction writing. A diagnostic text was employed in the first meeting to see the students' profile in writing. It was to expose students'

difficulties and skill deficiencies during the course (Hughes, 2003; Cohen, 2007). Meanwhile independent construction text was employed in independent construction stage of genre based approach. Independent construction writing was applied in the final stage after several stages of teaching writing in genre based approach were conducted.

### **3.3.1.3 Questionnaires**

Questionnaires were widely used for exploring students' opinion and their writing attitude toward the implementation of the teaching cycle (Hyland, 2013). The questionnaires were used for collecting large amounts of students in opinion to teaching cycle in the classroom. The questionnaires which were used in the study were in open-ended format. Open ended questions include items where the actual question is not followed by response options for respondent to choose but rather by some blank space (Dörnyei & Taguchi, 2010). An open-ended question can catch the authenticity, richness, depth of response, honesty, and candor (Cohen et al., 2013). Therefore open-ended questionnaires were suitable to find out the students' opinion toward the teaching program in this study.

There were 18 questions which divided into 5 major themes; using photographs in BKOF activities, using photographs in MOT activities, using photographs in JCOT activities, using photographs to write recount text, and students' suggestions toward the teaching program. These questions were developed to support the analyses of students' opinion on using photographs as multimodal text in writing recount text. Furthermore, the questionnaire was constructed based on the theory about genre based approach proposed by Derewianka (1990), Feez (2002), and Gibbons (2002), and theory about teaching multimodal proposed by Royce (2002), and Walsh (2011).

Inter-rater and content validity were conducted to validate the questionnaire (Cohen et al., 2013). First of all the questionnaire was consulted to the researchers' lecturers and colleagues to see the compatibility of each question to achieve the aim of the questionnaires. Then the questionnaires were distributed

to 10 students who did not involve as participants in the study. It was done to see the readability of each question to the students. After all, the questionnaires were distributed to 29 students which involved in the teaching program.

#### **3.3.1.4 Interview**

Interviews helped researcher to explore the participants' view on the topic (Marshall & Rossman, 2006). The interview offered more interactive and less predetermined modes of eliciting information (Hyland, 2013). The interview in this study were formed in the semi-structured interview. It was the combination of a certain degree of control with a certain amount of freedom to develop the interview (Wallace, 1998). Therefore, participants were able to discuss their interpretation and perspectives toward the teaching program.

In this study, the interview was conducted to gain deep information from the students about the teaching program. In line with the questionnaires, questions in interview were developed to support the analyses of students' opinion on using photographs as multimodal text in writing recount text. There were 10 guided questions in the interview. The questions were constructed based on the theory about genre based approach which was proposed by Derewianka (1990), Feez (2002), and Gibbons (2002), and theory about teaching multimodal which was proposed by Royce (2002), and Walsh (2011). To validate the questions in the interview, the researcher did inter-rater validity (Cohen et al., 2013). The questions were consulted to the lecturers and colleagues to see the compatibility of each question to gain more information toward the teaching program.

#### **3.3.2 Procedure**

Regarding the instrument in collecting the data, the following are the procedures of constructing and conducting those instruments. First is the observation note. In this study the researcher contributed as the teacher and acted as participant observer of the study. Immersion in the setting permits the

researcher to hear, to see, and to experience reality in natural setting (Marshall & Rossman, 2006). The researcher took notes on everything that was going on in the class and as soon as leaving the class and events were reconstructed into field notes. The observation notes were written immediately after each session. It is because the memory of the observation was still fresh (Van Lier, 1996). The observation notes focused on both what the students and the teacher had said and done in the setting (Cohen et al., 2013).

Furthermore, the students' texts were collected at various stages of the research program including diagnostic stage, joint construction, and independent construction stage. The researcher collected the students' written works which were produced in the teaching program to find out the characteristics of their text. Students' written works constituted the main resource of information to reveal students' development in writing ability.

Moreover, the questionnaire and interview in this study were designed to adapt the theory of teaching multimodal text proposed by Walsh (2008, 2009, 2011, and 2012). This aims to obtain more comprehensive data of students' opinion toward the teaching program. There were about 18 questions of open ended questions in the questionnaires to see the authenticity, richness, depth of response, honesty, and candor of the issue (Cohen et al., 2013). It was distributed to 29 students which involved in the teaching program.

Meanwhile, the interview was administered in semi-structured questions. It was to enable the researcher to get all information required while at the same time permitted the participants' freedom of responses and description to illustrate the concept (Wallace, 1998). In this study, the interview was done to six participants. The participants from high, middle, low achiever were interviewed to reveal their opinion toward the use of photographs as multimodal materials in teaching writing. The interview was conducted face-to-face and involved one interviewer and one participant.

### **3.4 Data Analysis**

The data collected were analyzed to describe the implementation of teaching multimodal recount text using genre-based approach. It was to see the development of students' writing ability and their opinion toward the teaching program. The data in the study was gathered from triangulation of students' writing documents, observations, questionnaire, and interview. The data analyses included content analysis of students' writing, notes from the observation, data from questionnaire, interview transcript, and notes on interview context.

The early stage in qualitative analysis is data management, in which the raw data are reviewed, labeled, sorted and code (McMillan & Schumacher, 2001; Darlington & Scott, 2002; Holliday, 2005). It is familiar as coding. This coding stage is the process of defining what the data are about. Afterward, the analysis will able to identify, map the range and diversity of each data to develop it into findings (Darlington & Scott, 2002; Creswell, 2012). The analysis then go to explanatory stage, in which the analysis data will build explanations about the finding, interpreting it and validating the accuracy (McMillan & Schumacher, 2001; Darlington & Scott, 2002; Holliday, 2005; Cohen, 2007; Liamputtong, 2009; Creswell, 2012).

#### **3.4.1 Classroom Observation**

The data of classroom observation was supported by field notes and videotaped. After finishing teaching activity in one meeting, videotape was played to get information about students' activity in the classroom. The information was also supported by field notes that were written soon after the meeting. The activities in the classroom were categorized based on the research questions and teaching stage.

There were three steps that were done to analyze the data of observation notes (Cohen et al., 2013; McMillan & Schumacher, 2001). First, observation notes during the teaching program were transcribed. Second, summarizing all activities during teaching program which relevant to the study, and matched the

data with the research questions. Third, the data was coded and categorized based on the theme. The result and discussion of observation, field note and videotaped were formulated in teaching program report (see chapter 4).

### **3.4.2 Students' Writing**

The framework of systemic functional grammar was used as a tool of analyzing genres. Therefore, students' documents in writing recount text were analyzed based on the schematic structure, and lexicogrammatical features of the text. The texts were analyzed based on systemic functional grammar in terms of transitivity and thematic system (Gerot & Wignell, 1994; Halliday & Matheissen, 2004; Eggins, 2004). The detail analysis of students' text was described in discussion of text analysis in chapter 4.

### **3.4.3 Questionnaires**

The questionnaires were firstly coded based on the theme (Dörnyei & Taguchi, 2010; Cohen et al., 2013). There were 18 questions which were divided into 5 major themes to support the analyses of students' opinion of using photographs as multimodal text in writing recount text (see the questions in appendix 6). The answers of each question in questionnaires were then categorized based on the theme. The data of questionnaire were then interpreted to answer the research questions.

### **3.4.4 Interview**

The data from interview was analyzed in several steps (Creswell, 2003; Cohen et al., 2013). First, the data was transcribed and converted in written forms and subsequently categorized and interpreted to answer the research questions. The transcripts were then read and condensed into briefer statement in which the main sense of what was said was rephrased in words (Kvale, 1996). Next, the data was coded and categorized. Then the interview data was interpreted to reveal students' opinion of the teaching program. The analysis of questionnaires and interview was outlined in detail in chapter 4.

### **3.5 Concluding Remarks**

This chapter has focused on a detailed methodological description of the conduct of study, including the research question formulated, the setting, the participants involved, data collection techniques and analyses that were employed in the study. The next chapter will provide description of teaching program done in this study.