# CHAPTER 3 METHODOLOGY

In this third chapter, the research design and methodology of this present study is discussed by explaining the site and participant involved in this study. Then, the design of the research study is also discussed. The procedures of collecting and analyzing the data are the last things that will be discussed in this chapter.

## 3.1 Site and Participant

This study was conducted in a secondary school in Cimahi, West Java that was selected for its achievement in winning several educational contests and in creating a good outcome. The access to the site was eased by the existence of researcher's colleague as a gate keeper in that school, so that the people in school could welcome the researcher. The process of building rapport was conducted during the preliminary study by joining the discussion with the teacher and regularly visiting the school. Along the way, a mutual trust had been established and the researcher could feel that the rapport and comfort level had been developed. This had provided a good context for this study.

The participant involved in this study was one English teacher and a class of students in the school. The teacher was selected among sixteen teachers from six different schools approached. The teacher was selected because of her uniqueness in which she was awarded as the best English teacher in the city. Specifically, several reasons dealing with the topic of this study were used to involve this teacher. They are (1) she had joined the training of the 2013 Curriculum and therefore had implemented the authentic assessment as mandated by the curriculum, (2) she was the most active, talkative and cooperative teacher, (3) she showed a great interest in the authentic assessment topic although she still had the confusion about it. Those rationales made it reasonable to involve only one teacher and her students with particular characteristics mentioned. Therefore, purposive sampling method as discussed by Fraenkel, Wallen, & Hyun (2012),

Creswell (2012) and Mack, Woodsong, MacQueen, Guest, & Namey (2005) was employed to select the respondent.

## 3.2 Research Design

A qualitative study embracing case study method was employed to guide this study. Since this study focuses on one case which is the authentic assessment in the 2013 Curriculum implemented by a teacher, case study is an ideal guiding framework as it is used in many situations that focus on particular group or an individual (Merriam, 1988; Berg, 2001; Yin, 2003, Creswell, 2007, 2009, 2012) conducting particular educational practice (Freebody, 2003). Besides, multiple sources of evidence or data triangulation as discussed by Yin (2003), Fraenkel, Wallen, & Hyun (2012) and Creswell (2007, 2009, 2012) were employed to gather the data. Therefore, those characteristics make this study belong to the case study design.

#### 3.3 Research Instrument

As one of the characteristics of qualitative research, the researcher took a role as the instrument (see Alwasilah, 2011; Bogdan & Biklen, 1992; Darlington & Scott, 2002; Mack, Woodsong, MacQueen, Guest, & Namey, 2005; Freeman, 2009; Crooker, 2009; Stake, 2010; Creswell, 2007, 2009, 2012; Fraenkel, Wallen, & Hyun, 2012; Gay, Mills, & Airasian, 2009). This implies that the researcher did the data collection activity by himself in order to adapt to the situation in the field, so that the valuable data could be gathered comprehensively. However, to ease the process of data collection, particular instruments were used. They consisted of interview guideline, observation sheet and filed note as well as document artifact derived from the theory of the implementation of authentic assessment (i.e. Newmann, Secada & Wehalge, 1995; Walvoord, 2010; Shermis & Di Vesta, 2011; Regulation of Ministry of Education and Culture Number 66, 2013 on Assessment Stanndard; Frey, 2014; Mueller, 2014; Majid & Firdaus, 2014;). Besides, the instruments are also derived from the theory of types of authentic assessment (i.e. O'Malley & Pierce, 1996; Janesick, 2001; Biswalo, 2004;

Regulation of Ministry of Education and Culture Number 66, 2013 on Assessment Standard; Mueller, 2014) and the assessed competences as mentioned in Regulation of Ministry of Education and Culture Number 66, 2013 on Assessment Standard and Kemendikbud (2014). Lastly, the instruments are derived from the theory of challenges of implementation of authentic assessment taken from Mehrens (1992), Shavelson, Baxter, & Pine (1992), O'Malley & Pierce (1996), Linn & Baker (1996), William (2001), and Lund (2012). The detail of the instrument is provided in the Appendix Section.

#### 3.4 Data Collection

To collect the data and to ensure the credibility, technique triangulation as proposed by Yin (2003) and also Creswell (2007, 2009, 2012) was employed to obtain the data from different source of the data by using different techniques. The data sources were the English teacher involved in the study with her students and the teaching administration in the form of syllabus, lesson plans, and the notes as well as the tasks. The data were obtained by using three techniques of data collection namely observation, interview and document analysis. The following subsections explain the techniques of collecting the data with the source of the data for each technique.

# 3.4.1 Observation

The first technique used to collect the data was observation. In this observation, nonparticipant observation as discussed by Creswell (2007, 2009, 2012), and Fraenkel, Wallen, & Hyun (2012) was used in order to obtain the data completely by observing the behavior or activity of the participant of the study without involving the activity directly. Observation sheets and field notes (see Appendix 2) were used as the primary means to gather the data in the observation. Besides, to support the credibility of the data gathered from this technique, each session of the observation was videotaped and the tapes were transcribed. These observations were conducted in the classroom for twelve sessions until the data are

'saturated' (Alwasilah, 2011; Malik & Hamied, 2014). Therefore, the rich data could be gathered to make thick description as discussed by Bogdan & Biklen (1992).

#### 3.4.2 Interview

The second technique employed was interview. There were two kinds of interview employed. Firstly, a semi-structured interview technique as discussed by Kvale (1996), Fraenkel, Wallen & Hyun (2012) Creswell, (2007, 2009, 2012) was used in order to maintain the focus and flexibility in practice (see Nunan, 1992). So, the rich and valid data could be gathered since the 'emic' or 'insiders' perspective was put forward through this data collection. Besides, this technique will be helpful to verify the data gathered from the observation. An interview session named General Interview guided by interview guideline (see Appendix 4) was conducted with the teacher. Then to clarify and verify the data, an interview session using guideline (see Appendix 6) was conducted with seven students selected based on the level of competence according to the teacher. Secondly, other form of interview called follow up interview or retrospection interview (see Nunan, 1992) was conducted following each observation to respond the activities in the observation. This interview could enable a clarification and reality check about the data. All interview sessions were audio-taped and later were transcribed. To add the meaning and core data of the interview quickly, the researcher also took a note the important things during the interview.

# 3.4.3 Document Analysis

The last technique used to collect the data was document analysis as discussed by Creswell (2007, 2009, 2012). This technique will be valuable in supporting the understanding of the focus of the research. Besides, it is conducted to obtain the supporting data from two previous data collection techniques. The documents were in the form of syllabus, lesson plans and

the notes of the teacher. In addition, several tasks and notes of the students became another source of ducoments.

To sum up, all data obtained through these three data collection technique were in line with the research questions. These were about (1) the implementation of authentic assessment in the 2013 Curriculum as discussed by Walvoord (2010); Frey (2014); Shermis & Di Vesta (2011); Mueller, (2014); Majid & Firdaus, (2014); and Newmann, Secada & Wehalge, (1995) consisting of (a) identifying the standard, (b) selecting authentic tasks, (c) identifying the criteria, (d) creating rubric, (e) gathering and analyzing information, (f) sharing the result and (g) conducting follow up action. (2) The types of authentic assessment in the 2013 Curriculum according to Regulation of Ministry of Education and Culture Number 66, 2013 on Education Assessment Standard embracing the theory from O'Malley & Pierce (1996), Jasenick (2001), Biswalo (2004), Oosterhof (2003), Wiggins (1993a), and Mueller (2014) consisting of (a) observation, (b) self assessment, (c) peer assessment, (d) writing sample, (e) constructed response, (f) performance (including demonstration and interview), (g) project, and (h) portfolio. (3) The assessed competences in the authentic assessment in the 2013 Curriculum according to the Regulation of Ministry of Education and Culture Number 66, 2013 on Education Assessment Standard consisting of (a) attitude, (b) knowledge, and (c) skills. (4) The Challenges of implementation of authentic assessment as discussed by Lund (2012), William (2001), O'Malley & Pierce (1996), Mehrens (1992), Shavelson, Baxter, & Pine (1992), Linn & Baker (1996) consisting of (a) time consuming, (b) validity of assessment, (c) low reliability, (d) task/technique development, (e) task/technique selection, (f) rubric creation, (g) resource administration, (h) evidence transformation, (i) subjectivity.

# 3.5 Data Analysis

This section demonstrates the way of data analysis of this study. To analyze the data, a thematic analysis will be used to follow Parker (2005), Braun & Clarke (2006), Clarke & Braun (2013a, 2013b), Howitt (2010) and The accumulated valid and reliable data were systematically Willig (2013). transcribed, organized, coded, thematically categorized, synthesized, and interpreted to answer the research questions of this study (Bogdan & Biklen, 1992; Silverman, 2005; Alwasilah, 2011; Fraenkel, Wallen & Hyun, 2012). The process of analyzing the data was conducted both through and after collecting the data (Bogdan, & Biklen, 1992; Silverman, 2005). The ongoing analysis was conducted for data that were assembled using observation sheets and filed notes of classroom observations, and the document artifacts. The rests were analyzed after the data had been completely collected. The process of analysis was based on the research questions of the study supported by the data collection techniques consisting of observation, interview, and document analysis. Therefore the findings will be discussed based on the research questions of the study. The data analysis of data from each data collection technique will be discussed below.

### 3.4.1 Analysis of Data from Observation

As discussed in Section 3.5, the data gathered from observation were about the types, the implementation, and the challenges of authentic in the context of the 2013 Curriculum from the viewpoint of the respondent of this study. The data from observation field note were directly analyzed. However, those that came from video recordings were first transcribed. Then they were organized, coded, categorized, synthesized, and interpreted based on the themes and codes from several theories.

## 3.4.2 Analysis of Data from Interview

Again, as has been also discussed in Section 3.4, the data gathered from interview were about the types, the implementation, and the challenges of authentic assessment in the context of the 2013 Curriculum. The data from interview recording were first transcribed. Then, as those in observation, they were organized, coded, categorized, synthesized, and interpreted based on the themes and codes derived from the theories.

## 3.4.3 Analysis of Data from Document

The rests of the data coming from documentation study were similar to the previous discussions. They were about the types, the assessed aspect, and the implementation of authentic assessment in the context of the 2013 Curriculum. These data were directly analyzed by organizing, coding, categorizing, synthesizing, and interpreting the data based on the themes and codes from several theories.

All in all, the themes and codes employed in the analysis were developed from the data gathered. However, some themes and codes were derived from the theory and they were reconstructed based on the actual data gathered from the field. First, the themes and codes were derived from theory of the implementation of authentic assessment in the 2013 Curriculum discussed Walvoord (2010); Frey (2014); Shermis & Di Vesta (2011); Mueller, (2014); Majid & Firdaus, (2014); and Newmann, Secada & Wehalge, (1995) consisting of (1) IS = identifying the standard, (2) SAT = selecting authentic tasks, (3) IC = identifying the criteria, (4) CRub = creating rubric, (5) GAI = gathering and analyzing information, (6) SR= sharing the result and (7) FUA = conducting follow up action. In addition, the themes and codes were derived from the types of authentic assessment according Regulation of Ministry of Education and Culture Number 66, 2013 on Education Assessment Standard embracing the theory from O'Malley & Pierce (1996), Jasenick (2001), Biswolo (2004), Oosterhof (2003), Wiggins (1993a), and Mueller (2014) consisting of (1) O =

observation, (2) SA = self assessment, (3) PA = peer assessment, (4) WS = writing sample, (5) CR = constructed response, (5) Per = performance (including demonstration and interview), (6) Pro = project, and (7) Por = portfolio. Then, the themes and codes were derived from the assessed aspects in the authentic assessment in the 2013 Curriculum according to the Regulation of Ministry of Education and Culture Number 66, 2013 on Education Assessment Standard consisting of (1) A = attitude, (2) K = knowledge, and (3) S = skills. Lastly, the themes and codes were derived from the theory of challenges of implementation of authentic assessment taken from Lund (2012), William (2001), O'Malley & Pierce (1996), Mehrens (1992), Shavelson, Baxter, & Pine (1992), Linn & Baker (1996) consisting of (1) TC = time consuming, (2) V = validity of assessment, (3) LR = low reliability, (4) TD = task/technique development, (5) TS = task/technique selection, (6) RC = rubric creation, (7) RA = resource administration, (8) ET = Evidence Transformation, (9) Sub = subjectivity. To conclude, the multi layer themes and codes from the theory that were used in this study can be outlined into the following table.

Table 3.1 Theory-Based Themes Used in the Study

Themes	Sub Themes	Code
Implementation of the assessment	Identifying the standard	IS
	Selecting authentic tasks	SAT
	Identifying the criteria	IC
	Creating rubric	CRub
	Gathering and analyzing information	GAI
	Sharing the result	SR
	Conducting follow up	FUA
	action.	
Types of Authentic Assessment	Observation	O
	Self-assessment	SA
	Peer-assessment	PA
	Writing sample	WS
	Constructed response	CR
	Performance	Per
	Project	Pro
	Portfolio	Por
Assessed Competences	Attitude	A

	Knowledge	K
	Skills	S
Challenges of Implementation	Time consuming	TC
	Validity of assessment	V
	Low reliability	LR
	Task/technique	TD
	development	
	Task/technique selection	TS
	Rubric creation	RC
	Resource administration	RA
	Evidence transformation	ET
	Subjectivity	Sub

The aforementioned data analysis process reveals the answers of the research questions of this study. Each data collection technique analysis could answer three research questions of this study. Therefore, the conclusion for the study can be made systematically and the thick description from analysis can be made from the rich data.