

CHAPTER III

RESEARCH METHODOLOGY

This chapter provides and elaborates the methodology employed in this study. It covers research design, research site and participant, data collection, data analysis, reliability and validity of the research, and concluding remark. It provides description of how the research was conducted.

3.1 Research Design

In order to fulfill its purpose to investigate the teacher's strategies in using the selected textbook for teaching and learning activities, a case study was used as a research design. Yin (2003) defined a case study as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 13). The research was started by identifying the problems from the particular condition. Then, it was formulated to the research question and categorized the problem into variables. After determining the variables of research, the relevant data collection techniques were designed to gather the data needed.

The data sources were derived from an interview, three times classroom observations, and personal documents in form of lesson plan. It is suggested by Alwasilah (2015) who said that case study allowed the use of multiple source of data, including observation, interview, archives, and so forth. In this case, the case study method was designed to investigate the situation or phenomenon of teacher's strategies in using textbook.

In addition, a qualitative approach was employed in this research because the following description and discussion would be focused on reports of the phenomenon or on data which cannot be adequately expressed numerically (Hancock, Ockleford, & Windridge, 2009). Moleong (2011) added qualitative research as a research which is intended to understand the phenomenon on the experience of research subject; it is not used statistical analysis procedure. In this

research, the researcher only observed deeply the real condition in the classroom without doing the experiment to get the expected results.

3.2 Research Site and Participant

This research was conducted at one public senior high school in Bandung, West Java. The research investigated the teaching and learning process designed by an English teacher of tenth grade. The site of the research was chosen because the problems were found when the researcher was being a training teacher in that school.

In addition, the tenth-grade students were chosen because: (1) it was appropriate with the aim of the research which wanted to know the teacher's way in analyzing the students' needs; (2) the teacher who was willing to be observed only teaches the tenth grade.

3.3 Data Collection

In this research, there are three data collection techniques, namely; classroom observation, interview and document analysis. Each data collection will be discussed below.

3.3.1 Classroom Observation

The first technique was employed to attain information about teaching strategies in implementing English textbook which used classroom observation. Qualitative research was being discredited because it came from the basic theory, thus the aim of using observation was to collect the data based on the ownership experience. The researcher's experience expected as a powerful reason to preserve the reliability (Moleong, 2011). Moreover, observation not only could prevent bias data, but also enable the researcher to understand the complicated situation.

The researcher acted as a complete observer who did not involve in the process of teaching and learning. This particular kind of observation was used because the researcher only observed a whole activity during teaching and learning English in the classroom. The observation result was objective because it drew the facts on real situations. During the observation, the researcher settled the

camera video in the best position to record the whole process of classroom activities, especially in the case of the strategies employed by the teacher in using the English textbook.

During the video recording, the researcher observed the situation and the condition during the class through the observation sheet. It was designed to identify what strategies of the excellent teacher employed in presenting the materials based on the textbook. It was also aimed at getting unseen actions of teacher and students moves or responses. The observation sheet consisted of 23 items of teacher's classroom strategies drawn and developed from Roberson (2006). This observation sheet served the thick description from the teacher who dealt with the textbook entitled "*Buku Bahasa Inggris Kurikulum 2013*".

3.3.2 Interview

The researcher interviewed the English teacher and 10 students in order to support the data collection. The teacher was interviewed in the beginning and the end of each observation in order to avoid preconception caused by the teacher which held before and after classroom activities. Meanwhile, the students were interviewed in the end of observation to explore their opinions on the teacher's strategies in using textbook.

In this research, the questions for interview were arranged by using the open-ended questions. It was designed to explore teacher's opinion in using a textbook. The questions have been prepared in order to clear the purpose of interview so that there is no answer which against the purpose. The interview for teacher consisted of 24 questions which were adopted from Nicholls and Nicholls's (1972) and Nasution's (1989) theory. The guideline questions would be shown in the table 3.1. Meanwhile, the interview for students consisted of 10 questions which were modified from Masson (2011) (see Appendix B).

Table 3.1 Guideline of the Interview

Kind of Questions	Number of Questions
Teacher's background in drawing available sources and objectives of teaching.	1 – 10
Teacher's strategy in selecting the methods	11 – 18

and materials to achieve the objectives.	
Teacher's aptitude in choosing assessment system.	19 – 21
Teacher's responsibility in giving feedbacks for the object lesson.	22 – 24

3.3.3 Document Analysis

Document analysis was also conducted in this research. It was used as a secondary data to support the information got from the main data. Lesson plans (L1 and L2) made by the teacher for different topics were the documents which analyzed by the researcher. The analysis results of students' works would be as well discussed in data findings and discussions.

3.4 Data Analysis

After collecting the data, the next step was analyzing the data. Data analysis was intended to answer the problem in research or to answer hypothesis. In this research, the data was analyzed by using case study qualitative research. It was used to describe and prove the object under study through existing data.

In line with this, in qualitative data, the data obtained were related to each other. It began from the data preparation into patterns to the display of data. Therefore, the data gained were needed to be reduced and put into patterns, categories, focus, or a particular appropriate theme (Mahsun, 2014). The description of those cycle, according to Faisal (2001 & 2003); Moleong (2001); dan Creswell (1994) as cited in Mahsun (2014) will be shown in the Figure 3.1.

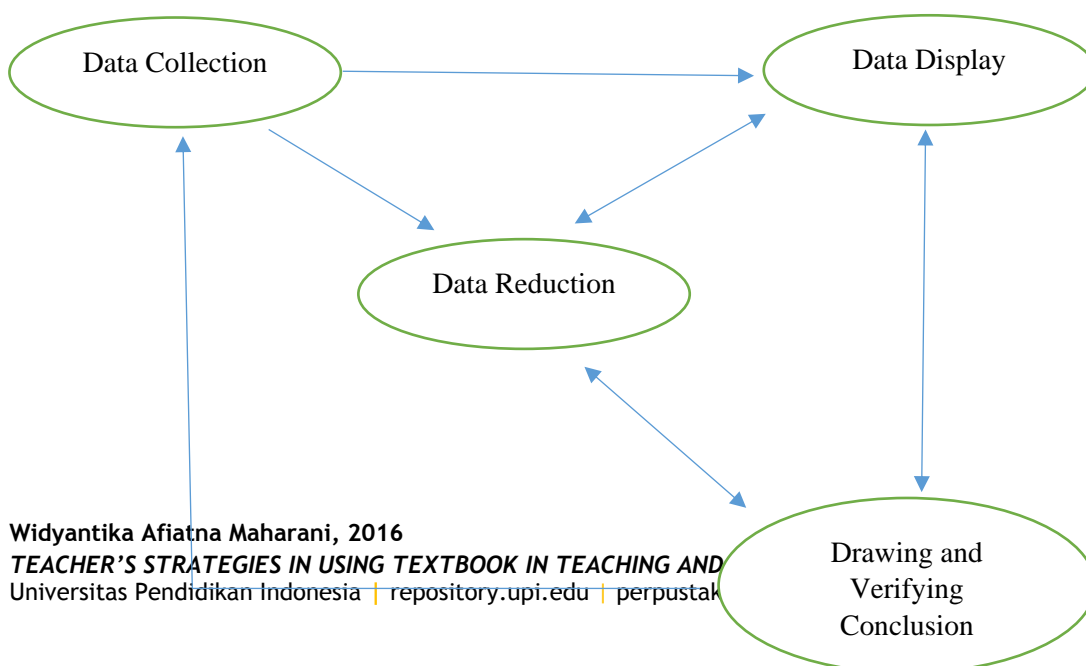


Figure 3.1 Component of Interactive Data Analysis Model

The description of data analysis described as follows.

1. Data Reduction

In this stage, the data obtained from classroom observation, such as video recording and observation sheet transcribed into written so it would be easy to learn. The same thing was also done on data derived from interviews and personal documents. After the data transcribed, the data were synthesized and analyzed for further summarized and selected which one is relevant to the focus of the problems examined.

2. Data Display

This stage is almost the same with the first stage. The data transcript from observation, interview, and personal documents were being presented and interpreted in qualitative research form. The difference is the data were being identified and classified using some codes understood by the researcher. The researcher can provide a code associated with the related theories consist of teacher strategies, such as the way teacher is choosing the materials, setting the objectives, designing learning methods, selecting assessment system, and providing feedback to the students. After being given a code, the researcher can draw a theme or main categories of any data for further discussed in finding and results.

3. Drawing and Verifying Conclusion

After all, the data classified based on the subcategories aforementioned before. The researcher made a table in doing the classification as shown in table 3.2 adopted from Alwasilah (2015).

Table 3.2 Classification of Data

No.	Subcategory	Data Quotation
1.	Choosing the materials	The teacher selects the material based on the students' need.
...		

The first column used for numbering the data. The second column for the subcategory or data coding as mentioned before, for example, it tells the way teacher selects the materials. Finally, the third column showed in which part the data can be categorized as the selecting materials.

In verifying the conclusion, all data collaborated with the previous study as the findings and results. Moreover, the data obtained associated with the other variables and should be checked the accuracy and the reliability of the data. Therefore, the next part would be discussed the reliability and validity of the research.

3.5 Reliability and Validity of the Research

In conducting qualitative research method, the data bias may occur and it is often doubtful for several reasons such as the subjectivity of the researcher, the instruments used is considered have many weaknesses, and the data sources less trustworthy that will affect the results (Bungin, 2014). To avoid that assumption, there are several steps in order to make the research more valid.

1. Triangulation

The first step conducted in checking the validity of the research was a triangulation of data sources and theories. The data sources triangulation carried out by comparing the all data already collected: observation, interview, and document analysis. They were examined for its consistency of different data sources within the same method (Patton, 1999). If the data were not consistent, it does not mean the data were invalid. Patton (1999) said that “the point is to study and understand when and why there are differences” (p. 1195). So, the research can be considered valid.

The theories triangulation is also important in gaining the information and relating the data to the previous study. The existing data described the patterns and their relationship, then they compared with the related theory. Patton called this term as “rival explanation” because the researchers should have another principle as a comparator.

2. Member checking

This strategy is important in gaining suggestion from the respondent of the research in order to prevent misunderstanding and misinterpretation (Alwasilah, 2008). The researcher confirmed the data results to ensure whether the data concluded matches with the answer given by the participant.

3. Rich data

To get rich data, the researcher should process the data obtained accurately because it has powerful substantiation in the findings of qualitative research and could not be manipulated. As mentioned by Maxwell (1996) that “the purpose of rich data not only as evidences resources of supporting conclusions, but also as a test for theories being developed” (p. 244). It was also aimed to prevent biases or skewed judgement that could turn up the conclusions.

4. Researcher’s bias clarification

The data bias could be minimized by using the variety of data collection techniques and long term research in order to complete the data. However, explicitly, the researcher should recognize and clarify their own bias to describe the assumptions and perspectives (Alwasilah, 2014). Moreover, the probability of bias usually appears in the background of the research.

5. Pilot study research

The three instruments aforementioned above were being tested in a small experiment in order to improve the quality and efficiency of instruments. Yin

(2003) asserted that a study of pilot is not a *pretest*. Pilot test is more formative; it refines the content and procedure of the instruments and develop the instruments with relevant questions. Moreover, the results of the pilot study would be presented at the end of this chapter.

3.6 Insights from the Pilot Study

A pilot study was conducted in this research before doing a real research. It aimed to measure whether or not the instruments would be worked out in this research. According to Johnson and Christensen (2014, p. 212), a pilot study used “to determine whether it operates properly before using it in a research study”. This theory in line with Mitchell and Jolley (2010), they said that in measuring pilot study before conducting the research, the researcher needs a few participants. It is used to avoid problem found during the real research. Therefore, this pilot study employed on April 26th, 2016 to an English teacher in one of the public senior high schools in Bandung by conducting interview and observation.

Based on the research question, this research wanted to gain the information about the teacher’s strategies in adapting materials from a textbook in the teaching-learning activities. So, the teacher was asked 12 questions about her strategies in using a textbook in the class. After conducting an interview, the teacher was observed, this technique makes the teaching-learning activities were more visible. The researcher acted as a complete observer who did not involve in the teaching-learning process. Video recorded and observation sheet were conducted during the classroom observation.

During the pilot study, the interview and observation sheet successfully worked out. However, there are some points highlighted from the insights of pilot study related to the implementation of the two instruments. First, the interview conducted in this research was semi-structured interview; the teacher answered the 12 questions given. Some additional questions were given to make a reconfirmation. For example, when the researcher asked about the textbook that she used in the classroom, the teacher mentioned and compared the textbook which have ever been used as instructional media. The researcher reconfirmed

that statement by mention the color of the textbook cover to camouflage the identity of the textbook.

In addition, the additional questions used to get depth information from the teacher. At the time the researcher asked the teacher about whether or not the teacher gave a text as an example to brainstorm the students in the beginning of the lesson. The teacher admitted that she did not provide any text because it has already consisted in the textbook. She said that she prefers asked the students to understand the meaning by translating the available text. In this case, the researcher interested on the way the students translated the text, whether being translated in written or oral.

This question did not provide in the question lists, however, the researcher needed this information because it was also included as a teacher's strategy in teaching reading context. It is in line with the type of interview which conducted open-ended question which allowed the interviewee answered the "unsolicited" statements (Shank & Bircher, 2009, p. 318). Despite that, all the questions had been prepared already asked to the teacher. Generally, the teacher's answers were also in accordance with the questions, although there was a question which was not answered appropriately.

The second point which was highlighted from the insights of pilot study was an observation sheet. There were 23 points in the observation sheet adopted from Robertson (2006). The observation sheet had been running well, but there were some numbers that need to be repaired. It referred to the addition of rows for comments, which aimed to make the observer write additional comments to what had been observed. Generally, the points contained in the observation sheet had been completely filled. The transcription of interview and the results of observation in form of observation sheet would be attached in the appendix C.

The problems encountered during the processing of pilot study are: 1) the observer had difficulty in finding teacher who wanted to be interviewed and observed because the materials are almost complete. So, most teachers were only reviewing what had been learned. 2) The observer came late to the class about 5-10 minutes after the lesson was beginning because the observer had a class before.

These problems can be used as a reference to be considered in carrying out the real research.

In conducting the real research, the researcher should concern on this matters: 1) add some questions for interview to get the detailed information; 2) ask a clear question in interviewing the teacher to avoid misunderstandings; 3) avoid conducting the research at the end of semester; 4) come 10 – 15 minutes before the beginning of the lesson to set up the observation equipment. These insights of the pilot study are expected to help the researcher in conducting the real research about the teacher's strategies in adapting the textbook.

3.7 Concluding Remarks

This chapter has discussed several points of research methodology of the research. This research is aimed at gaining information of the strategy implemented by the teacher in the way selecting, adapting, and creating the materials into the activity in teaching short functional text.

The chapter has presented statements of problem, research design, research site and respondent, data collection techniques, data analysis technique, and reliability and validity of the research. The next chapter is going to discuss and analyze the data from the research data collection techniques.