

CHAPTER III

RESEARCH METHODOLOGY

This chapter elaborates the methodology of the study. It explains the method of the study covering the descriptions of research design, site and participants, data collection techniques and data analysis.

3.1 Research Design

As presented in Chapter I, the aims of this study are to find out the teachers' strategies in promoting student questioning, to know the students' opinion about the frequency of teachers' strategies in promoting student questioning in their class and to reveal the effective strategies in promoting student questioning from teachers' perspective. These aims relate to the teachers' ways in encouraging their students to ask more questions during the teaching learning process in EFL class.

Considering the purposes of this study, qualitative research is considered to be the appropriate research design for this study since the topic of investigation is a specific phenomenon that was described and analyzed, and it explores people's life histories of everyday behavior (Silverman, 2005, p.6). Additionally, the investigation was about the detail description of the teachers' action in promoting student questioning. As Creswell (2004) points out, qualitative studies are able to develop a level of detail about the individual or place and to be highly involved in actual experiences or practices. Thus, a descriptive qualitative study was applied to conduct this research.

3.2 Site and Participants

In selecting the site and participants, this study employed purposive sampling which uses personal judgment to select them representatively (Malik & Hamied, 2014). In this research context, two English teachers in a Senior High School in Purbalingga were involved as 'key respondents' and their students were involved in responding questionnaire of the research.

The site of the study was a senior high school in Purbalingga, Central Java which was chosen based on several reasons. First, the school is regarded as one of the schools in Purbalingga which has good achievements in term of teachers' and

students' qualities. As cited in *SatelitPost.com*, the school achieved the best National Exam score in Purbalingga which was the highest among twenty one schools in that regency ("Redaksi *SatelitPost*", 2016). Second, the school is one of piloting schools of the implementation of 2013 Curriculum in Purbalingga which is expected to be able to give a portrayal of the lesson in 2013 Curriculum context. Lastly, the school policy allowed the researcher to conduct the study and to collect the necessary data especially permitting the two English teachers and their classes to be observed.

The teachers were selected due to the fact that they are qualified teachers and have much teaching experience, especially in relation to the implementation of the 2013 Curriculum in their teaching. Moreover, their high qualification is proven by the fact that they have graduated from a master degree, and they have twenty-three years teaching experience. To improve their teaching professionalism, the teachers have joined many workshops and seminars on English language teaching. The consideration which is most related to this research is that the teachers have knowledge, beliefs, and thoughts of promoting student questioning in their teaching and learning process in EFL class. Thus, the teachers were expected to give sufficient information to answer the research questions. Besides, eighty students of their classes were as respondents of the questionnaire.

3.3 Data Collection Techniques

This section describes the way the data of the study collected. To answer the statements of the problem, this study used several techniques to gain the data including observation, interview, and questionnaire.

3.3.1 Observation

In this study, the observation was conducted to collect the data from the classroom. Particularly, the classroom observation was used to gain information about the teachers' strategies in promoting student questioning and to reveal the effective strategies used by each of them. The objects of observation were the teachers' ways in using the activities and utterances in encouraging their students to ask more questions during the class, and the types of students' questions affected by the strategies. This procedure is in line with Silverman's (1993) notion

that direct information about social processes in a naturally existing context is gathered through observation. Classroom interaction including teacher-student interaction and student-student interaction were obtained to reveal the teachers' strategies in promoting student questioning. This helps researcher analyze theory in use and participant point of view which is not exposed in the interview session (Alwasilah, 2012).

Considering one of the characteristics of a qualitative study, all the data collection processes were not manipulated. All of the teaching and learning processes observed were going as the teachers' plans. In addition, the observation was employed in several times until the data got sharpened and grounded. After conducting six sessions of observation for each teacher, the data were considered enough. Each session took two study hours.

In this research, non-participant observation was acted by the researcher in the classroom. The researcher sat behind the classroom and recorded the classroom activities using a video recorder. The video recorder was placed behind the class in order to reduce interruption during the teaching-learning process and to keep setting natural.

To obtain indispensable information for answering the research questions, observation sheet (see appendix 1) was used to guide the researcher in conducting the observation and notes taken for capturing the important point (see appendix 8 and 9). The observation sheet was developed consisting some indicators about teachers' ways in promoting student questioning that were proposed by several experts (Rosenthal, et al., 1970; Rosenthal & Zimmerman, 1972; Zimmerman & Pike, 1972; Cornbleth, 1975; Biddulph, Symington & Osborne, 1986; Watts, Gould & Alsop, 1997; Chin, 2002; Chin, 2004; Bowker, 2010; and Navtalie, 2014), and types of students' questions purposed by Coutinho & Almeida (2014). The following table shows the indicators of the observation.

Table 3.1
Indicators of Observation

No	Indicators	Codes
1.	Teachers' Ways in Promoting Student Questioning	
	a. Modelling questions-asking	MQ
	b. Modelling question-asking with praise	MQP
	c. Giving explicit instruction	EI
	d. Giving opportunities	GO
	e. Supporting students to ask productive questions	SAQ
	f. Supporting students to learn particular types of questions	SLQ
	g. Using suitable stimuli	SS
	h. Developing a receptive classroom atmosphere	DRC
	i. Using question-asking in evaluation	QAIE
	j. Giving free question time	FQ
	k. Using interactive instructional approach	IIQ
	l. Considering nature of task	Cnt
	m. Considering learning approach	Cl _a
	n. Considering learning strategies	Cl _s
	o. Giving turn-taking questions activity	TTQ
	p. Giving time set to ask questions	STQ
	q. Using PBL	PBL
	r. Using question-centre pedagogy	QCP
	s. Using Question Formulation Technique	QFT
2.	Types of Students' Questions	
	a. Closed questions(Low level)	LL
	b. Open questions (High level)	HL

The data from observation were then cross-referenced with the data from questionnaire and interview. The use of these various data collection techniques was to complete the data triangulation. The data from observation was crucial

since it was the main instrument to reveal the teachers' strategies in promoting student questioning.

3.3.2 Interview

The interview was conducted to reveal convenient information that cannot be gained through observation and questionnaire, and to expose in-depth and detailed information from participants (Alwasilah, 2012; Creswell, 2008). Besides, interview was also used to elicit respondents' perception about how far the thing is appropriate to a single meaning in their experience (Silverman, 2005). Two interview sessions were addressed to the teachers to reveal the data for answering the research questions in this study. The first session interview was undertaken before the classroom observation to gain background knowledge of the teachers about the strategies in promoting student questioning. Then, to reveal the effective strategies in promoting student questioning and to confirm the observation results about teachers' strategies in promoting student questioning, the second session interview was conducted after the classroom observations.

In accordance with the type of the interview, semi-structure was used in this study. As an interviewer, the researcher provided an asymmetrical structure interview in which the interviewer initiated questions and posed probes in response to the interviewee's descriptions (Berg, 2004). The researcher ordered the questions, adjusted the language, answered the questions and added or deleted probes in the interview session to get the comprehensible data (Berg, 2004).

In conducting the interview, an audio recorder, paper, and pen were used as tools by the researcher. Besides, interview guide consisting of some questions was used as the instruments (see appendix 3 and 4). Several indicators were used to guide the researcher in elaborating the interview questions. These indicators are shown in the following table.

Table 3.2
Indicators of Interview

No.	Indicators
A. Interview I	
	<ol style="list-style-type: none"> 1. Teachers' knowledge about student questioning 2. Teachers' knowledge about their students' questions 3. Teachers' beliefs about the importance of student questioning 4. Teachers' beliefs and knowledge about the advantage of student questioning 5. Teachers' beliefs about the importance of encouraging the students to ask more question in EFL class 6. Teachers' practice about their ways in promoting student questioning
B. Interview 2	
	<ol style="list-style-type: none"> 1. The confirmation of observation results about teachers' strategies in promoting student questioning 2. The motivation of the teachers in implementing their ways in promoting student questioning 3. The teachers' problem in promoting student questioning in their classes. 4. The effective strategies in promoting student questioning

Open- and close-ended questions were arranged according to the indicators. The close-ended questions were used to confirm the observation results and open-ended questions were addressed to elicit more detailed information from teachers' perspective regarding to their beliefs, knowledge, and practices. The numbers of interview question were adjusted to the observation results from each teacher.

3.3.3 Questionnaire

Questionnaires which consist of a written list of structured questions were distributed to the students (Gay, Mills, & Airasian, 2009) to gain students' opinion to confirm the result of the observation and interview and to reveal how frequent their teachers use the strategies in promoting student questioning in their class. In other words, the data of the questionnaire are to support the main data from observation and interview. The respondents of the questionnaire were eighty students who were randomly selected.

In this study, close-ended questionnaires were constructed in the form of multiple choices in fifteen items. The items of the questionnaire used Likert scale – often, sometimes, never (Fraenkel, Wallen, & Hyun, 2012) in order to reveal

students' opinion about frequencies of occurrences (Alwasilah, 2012) of teachers' strategies in promoting student questioning in EFL class.

The items of the questionnaire were generated according to the result of the observation and interview of each teacher. Since each teacher had different results of observation and interview, some questionnaire items were constructed in different stems. The indicators of the questionnaire are displayed in the following table in which the items of the questionnaire are divided into two part, A stands for questionnaire of teacher A's students and B stands for questionnaire of teacher B's students.

Table 3.3
Indicator of Items of Questionnaire

Indicators	Items of Questionnaire	
	A	B
a. Supporting to ask question	1	1
b. Giving opportunities	2	2,14
c. Giving task & activity that promote student questioning	3,4,6,9,12	3,4,5,9,12
d. Giving feedback to students' questions	14	6
e. Giving praise and rewards to students' questions	7	7,8
f. Giving explicit instruction to ask questions	10	10
g. Supporting students to learn particular types of questions	11	11
h. Modeling asking question	-	12,13
i. Practicing silence	-	15
j. Providing stimuli to ask questions	5,8,13,15	-

To avoid the students' roguishness in answering the questions that might affect the validity of the questionnaire, the identity of the respondents were in anonymous. In addition, the questionnaire was constructed in *Bahasa Indonesia* to achieve the comprehensible content for the students so that the objective of the questionnaire could be achieved.

3.4 Data Analysis

To answer the research questions of this study, data analysis was conducted. As presented in the earlier section, three data collection techniques, observation, interview, and questionnaire were used in this study. Hence, there are three types of data in this study.

The qualitative data of this research were analyzed through the process of analyzing, coding, categorizing, synthesizing, and reducing the information from the collected data (Gay, Mills, & Airasian, 2009; Fraenkel, Wallen, & Hyun, 2012). The data analysis was conducted using a framework analysis. This framework analysis was not developed by synthesizing the theories about strategies or ways in promoting student questioning from several experts (Rosenthal, et al., 1970; Rosenthal & Zimmerman, 1972; Zimmerman & Pike, 1972; Cornbleth, 1975; Biddulph, Symington & Osborne, 1986; Watts, Gould & Alsop, 1997; Chin, 2002; Chin, 2004; Bowker, 2010; and Navtalie, 2014) (see appendix12). These various theories were synthesized as an attempt to gain sufficient data to answer the research questions. From this framework analysis, the instrument of each data collection techniques was developed, and then findings could be established.

3.4.1 Data from Observation

The data from observation are used as reference to reveal the teachers' strategies in promoting student questioning and to support the data from interview about the effective strategies in promoting student questioning from teachers' perspective. After collecting the data in the sites, the results of each session of observation were then reviewed and examined whether they were relevant to the teachers' strategies in promoting student questioning or not. From six sessions of observation in the teacher A class, only four session were used contributing this study. Likewise, from six sessions of observation in the teacher B class, the researcher only selected four sessions to be analyzed in this study. For the reason that the four sessions of each teacher are the most related to the objective of this research. After that, the selected session of recorded data were transcribed into word document.

Analyzing the transcriptions was then conducted after the transcriptions of recorded data from observation were written. There are several stages of analyzing data from observation. Firstly, the transcriptions were examined carefully whether the data related to teachers' ways in promoting student questioning or not, then to be coded according to the indicators of observation (See table 3.1). Secondly, the coded data were categorized and put into several categorizations as the strategies in promoting student questioning in the observation sheet (see appendix 2). The categorized data was then synthesized with the data from interview and questionnaire. Lastly, the data that was not related to the research were reduced. The data in the categorization were then put in the form of excerpts of observation results that would be displayed in the data presentation in Chapter Four.

3.4.2 Data from Interview

The main purpose of interview was to answer the third research question of this study to find out the effective strategies in promoting student questioning from teachers' perspective. Besides, the data of interview were also to support the data from observation, particularly to gain the consideration and motivation of the teachers in implementing their strategies in promoting student questioning. The recorded audios from the interview were then transcribed into word document.

Before the transcriptions of interview were analyzed, the researcher consulted the printed transcriptions to the teachers ensuring what the researcher perceived in the transcriptions is what was actually spoken by the teacher. After getting approval of the teacher, the analysis of interview data was conducted.

There are several procedures of analyzing data from interview. Firstly, the transcriptions of interview were reviewed and selected to find out the most related utterances to the objective of the interview specifically according to the indicators of interview (see table 3.2). Then, the related utterances in the transcriptions were coded according to the framework of analysis (see appendix 12). The coded data were then categorized and put into several categorizations of teachers' strategies in promoting student questioning in the framework of analysis (see appendix 5).

The data from interview that had been categorized would be synthesized with the data from observation and questionnaire to find out the results of this

research. The data that were not included in the data categorization were reduced. In the meantime, the results of interview were the utterances that were included in the categorization which became excerpts of interview results. These excerpts would be presented in the data displays in the Chapter Four which were translated into English without changing any content of the utterances.

3.4.3 Data from Questionnaire

To support the data from observation and interview, questionnaires were distributed to the students. Particularly, the questionnaire was to gain the students' opinion about the frequency of teachers' strategies in promoting their questioning in class. Hence, the result of questionnaire would enrich the data from observation and interview derived from the students' perspective.

After all the questionnaires from the respondents were collected, they were checked and reviewed whether the questionnaire had answered completely or not. Then, the responses of close-ended questionnaire were tabulated in the Ms. Excel to find out the results. All the selected response of each items were put into table of questionnaire analysis to know the result of percentage of each item (see appendix 7). Since this study was a qualitative research and the questionnaire was only the secondary data, the simple quantitative analysis was conducted. The tabulation of questionnaire was conducted to determine the percentage of each alternative response in each item by using the following formula.

$$P = \frac{\sum n}{\sum N} \times 100\%$$

Where, P = the percentage score,

n = the obtained score,

N = the total scores of the items

Then, the results of the percentage of each item were described descriptively to show the students' opinion about the frequency of each strategy that was implemented by the teachers. Each item was coded and then the description of each item was then put into the framework of analysis which would be synthesized with the result of observation and interview.

After all the data from observation, interview and questionnaire were analysed and categorized into the framework of analysis. The researcher identified the dominated patterns that emerged as teachers' strategies in promoting student questioning in EFL class. Those emerged patterns were then interpreted with the theoretical review in Chapter Two which then developed concepts. Lastly, after all the data have been analyzed and interpreted, the conclusion of the research found the results of teacher's strategies in promoting the student. These results were presented in the thick descriptions in the findings and discussions section.

3.5 The Validity of the Data

Validity is "the truth and trustworthiness of a description, conclusion, explanation, interpretation and all types of report" (Alwasilah, 2012, p.125). Alwasilah (2012) stated that validity is a purpose, not a result in which the researcher's responsibility is to provide strong evidence and groundwork so the readers trust to the truth of the report.

Hence, this study applied a number of strategies to ensure the validity. To attain the internal validity, uniformity of the findings with the reality, this study used triangulation, member checks, and peer examinations. Meanwhile, in achieving the external validity, a thick description was used in this study.

3.5.1 Triangulation

Triangulation implicates the way of viewing things from more than one perspective; the use of different methods, different sources of data or even different researchers within the study (Denscombe, 2010). This strategy was used to obtain a complete picture what is being studied and to cross-check information (Gay, Mills, & Airasian, 2009).

This study used data triangulation to achieve the validity of the findings. As Denscombe (2010) states, "the validity of the findings can be checked by using different sources of information; comparing different informants, using collected data at different times, or using space triangulation" (p.347). The researcher collected the data of the study using different data collection techniques that were derived from the different informant. Precisely, the three data collection techniques, observation, interview, and questionnaire were used to gain rich and

complete data. The different sources of data, from classroom activity, teachers' perspective and students' opinion were expected to triangulate the findings of the study. All the data gathered from multiple data collection techniques and different sources of data confirm the emerging finding (Merriam, 1988).

In short, the data triangulation of this study created the findings of this study ensuring the validity. With the expectation, the internal validity of this study would be achieved.

3.5.2 Member Checking

Member checking, known as respondent validation is a procedure whereby the researcher goes back to the subjects to investigate and to check whether the tentative result is correct or not (McMillan & Schumacher, 1997; Reason & Rowan, as cited in Silverman, 2005; Alwasilah, 2015). In addition, Alwasilah (2015) stated that in a qualitative study, this procedure was needed to be conducted to obtain the emic perspective in the early stage.

This study applied member checking to the results of observation and interview two times. Firstly, member checking was done after the transcripts of observation and interview were drawn. This practice was to ensure whether the activities in the classroom obtained correctly or not, and to confirm the teachers' utterances in the transcript were perceived properly or not. Secondly, member checking was conducted after the researcher drawn the draft of results of the research in order to approve the truth of the results.

To sum up, member checking was used as a procedure to ensure the validity of the data and result of this research. This strategy was expected to achieve the validity of this research.

3.5.3 Peer Examination

Peer examination known as peer debriefing is an activity of sharing with colleagues about the research procedure until achieving consensual validity (Schwands, as cited in Alwasilah, 2015). In particular, Alwasilah (2012, 2015) suggested that in peer examination, the researcher is required to call feedbacks from colleagues to review and examine findings that emerged in the research.

In doing this study, discussing, reviewing and sharing information about the findings of this research with colleagues were conducted by the researcher in order to gain feedback and input from another viewpoint. This strategy also helped the researcher in interpreting the data. Lastly, peer examination was conducted as an effort of the researcher in achieving the internal validity of the research.

3.5.4 Thick Descriptions

Thick description is one of the strategies in achieving the validity of the research through drawing out a complete picture of the human, occurrence, or observed process in great detail frequently using extensive quotations from the participants in their study (Alwasilah, 2012; Berg, 2004; Fraenkel, Wallen, & Hyun, 2012). Moreover, providing a thick description in the study helps the readers to perceive the concept of transferability from findings of the qualitative study, and avoids inaccuracy and incompleteness of the study (Alwasilah, 2015).

This study provides a thick description in presenting the findings of this study. As an effort, the researcher obtained rich data from the field in order to draw the detail information. To achieve this purpose, the researcher conducted the observation by videoing the classroom activity and also using observation notes. This way would help the researcher obtain the data completely since the recorded video could be repeated over and over again until the detail results drawn. Further, the interview also used an audio recorder to record the teachers' utterances in providing their arguments. From the transcript of interview resulted from audio recorder help the researcher analyze the data and interpret them incomplete information in the results.

In short, analyzing, presenting, discussing the data were conducted as complete as possible to provide a detailed description of the study. The aforementioned ways were an attempt to achieve valid interpretation and conclusion of the research.