CHAPTER THREE

RESEARCH METHODOLOGY

After discussing some related theories on meaning negotiation in classroom interaction, this chapter presents some methodological aspects of the present study which attempt to find answer answers to 1) the way of how meaning is negotiated between teachers and students in a classroom interaction, and 2) the problems of the teachers in negotiating meaning. Through this chapter, several points to discuss are research design, research site and participants, as well as instruments and data collection procedure. To complete the discussion, this chapter also reviews the technique of data analysis.

3.1 Research Design

This study adopts a qualitative approach as it involved qualitative data analysis. It also allows the researcher to work with more than one data-collecting method including observation, interviews and questionnaire as suggested by McDonough and McDonough (1997 in Ahlsen and Lundh 2007:11). This study also has a characteristic of case study because it was carried out in "a small scale, a single case" (Stake, 1985:278 as cited in Emilia, 2005:74).

This research was set out to observe the meaning negotiation strategy between teachers and students in a classroom interaction where English is used as a medium of interaction. The data were observed by using the criteria proposed Pica and Doughty (1985);Tarone (1981); Lyster (2007) cited in Abdullah (2011) which consist of comprehension check, clarification request, confirmation checks,

word coinage, use of approximation, self repetition, other repetition, correction and non verbal expression.

However, this research was slightly different from Tarone (1981) and Lyster (2007) which is cited in Abdullah (2011) in terms of the use of the strategy. This research used only seven strategies namely comprehension check, clarification request, confirmation check, use of approximation, self repetition, other repetition and self correction.

Moreover, this research also used to find out the meaning negotiation problems which are faced by the teachers dealing with the meaning negotiation strategy. The meaning negotiation strategy was focused on grammar, pronunciation, scientific concept and general vocabulary developed by Meshito (2008). Then, to cover these phenomena, this research used some quantification by using percentage proposed Hatch and Farhadi (1981).

3.2 Research Site and Participants

This study was conducted in four science classes at a Fledgling International School of a junior high school in West Java, Indonesia. This school was basically chosen purposively due to the use of English as a medium interaction in the classroom for whole subjects. Besides that, the familiarity of the teachers and the students can enhance the feasibility of this study.

In this study, four science teachers in RSBI classes were chosen purposively because of several considerations. First, they were willing to fully participate in this study. Second, different from other classes, through the

preliminary study, in these classes English was frequently used as the medium of interaction in the teaching learning process. Third, the teachers taught science by using English even though they were not graduates of an English department. They also attended a one week and one month English short course. The characteristics of the teachers can be seen in the table below.

Table 3

Teacher Characteristics

Characteristics/ Name of Teachers	Teacher A	Teacher B	Teacher C	Teachers D
Teachers in	Biology	Biology	Biology	Physics
Age	44 Years	46 Years	32 Years	50 Years
Gender	Female	Female	Female	Female
Graduate	S-1 Biology	S-1 Biology	S1- Biology	S1- Physics
English Training	Short Course a month	Short Course 2 times a week	Short Course a month	Short Course 2 times a week
Score TOEFL or others language proficiency	330	403	425	-
Length of Teaching	22 Years	23 Years	7 Years	29 Years

In this regard, four classes of the eighth grade were chosen purposively due to their uniqueness as the pilot study revealed showing the students were very active and enthusiastic in discussing the topic given by their teachers in English. Finally, it will potentially lead to a large number of occurrences of meaning negotiation.

Regarding technical issues in qualitative research, Silverman (2005:257) said that the researcher should be responsible to the study when studying people's behavior or asking them questions. Accordingly, the present study used an

informed consent to address ethical issues. It was given to the teachers and the students to be filled in and signed prior to collecting the data.

3.3 Data Collection

The data were obtained from several sources including classroom observation which involved video recording. In addition, questionnaire was also used to the teachers dealing with meaning negotiations problems in the classroom interaction.

3.3.1 Classroom Observation

Classroom observation and video recording ware conducted as the main procedure for collecting data. In the view of Frankael and Wallen (1993:384), observation is a kind of research that observes of how people act and how thinks look. It is in line with the general aims of this study, that is to examine how the participants (the teachers and the students) negotiated meaning in the classroom interaction.

This study employed non participant observation to gain the data. As outlined by Fraenkel and Wallen (2007:450), in this kind of observation researcher did not participate in the activity being observed but rather watched the classroom interaction. Since the researcher's presence was realized by the participants, a problem might occur during the classroom observation, i.e. what Labov (1972 in Bailey 2001) has called 'the observer's paradox' or Hawthorne effect', i.e. that by observing people's behaviour we often alter behavioural pattern we wish to observe. In this study, to overcome such a problem, the video

was placed at the back side of the classroom. In addition, the researcher firstly introduced himself and his reason for visiting their lessons and made sure to explain the purpose of the observation in general terms as suggested by Bailey (2001:188). It included a confirmation that trough the observation, students and the teachers were not observed for supervisory purposes.

Four classroom activities were observed. Each observation lasted for about seventy minutes in one session. The recorded video was replayed and transcribed to discover the meaning negotiation strategy used by the teachers and the students in the classroom interaction.

3.3.2. Questionnaire

To gain more accurate data, open-ended questionnaires were given to the teachers to find out the data of meaning negotiation problems. The questionnaire consisted of three categories of teachers and students problems in negotiating meaning. The three categories are as follows:

Table 4

Categories of Meaning Negotiation Problems

Language Elements	a. Pronunciation - Vocal sound - Vowel sound - Intonation
	b. Vocabulary - Science vocabulary - General Vocabulary
	c. Grammar - Subject verb agreement - Part of speech - Tenses

3.4 Data Analysis

In this part, some techniques for analyzing transcribed data from observation and interview will be described. In addition, some tables are also included to give more illustrations.

3.4.1 Observation

The videotaped data from observation were then transcribed. The transcriptions were read repeatedly to identify some utterances related to the way of the teachers and students negotiate meaning. After that, the data were then classified into several categories suggested by Long at al (1983 in Abdullah 2011), which consist of *comprehension check, clarification request, confirmation check, self repetition, other repetition, use approximation, self correction.*

After identifying and classifying data, quantification was also used to find the total number of the students' and the teacher's utterances in the meaning negotiation, which is later presented in the table as follows.

Table 5

Types of Meaning Negotiation Strategy

Types of Strategy	Frequency	Percentage
Comprehension checks		
Confirmation checks		
Clarification requests		
Self correction		
Self repetition		
Other repetition		
Use approximation		

To get more comprehension, the categorizations of videotaped data were analyzed descriptively to gain clear occurrences of each strategy employed by both teachers and students in meaning negotiation process. It is in line with the

reason stated by Creswell (1994:162) that the data that immerge from qualitative study are descriptive, that is, data are reported in words.

This descriptive report was to give more explanation about the seven strategies of the strategy used by the teachers and the students in the classroom in. meaning negotiation which was supported by the data from transcription of the video recording. In addition, the descriptive report supports the second research questions covering the meaning negotiation problems. The problems identified from the observation were used to validate the problems found in the questionnaire.

3.4.2 Questionnaire

In this research, questionnaire adopted from Meshito et al (2008) was analyzed quantitatively by using the formula presented by Hatch and Farhadi (1981) to find out the perception of the teachers problems and negotiating meaning. The categories are as follows:

Table 6

Categories of Meaning Negotiation Problems

	Language Elements		Frequency
Meaning Negotiation Problems	a. Pronunciation	Consonant sound	
		Vowel sound	
		Intonation	
	b. Vocabulary	Scientific vocabulary	
		General Vocabulary	
	c. Grammar	Subject verb agreement	
		Part of speech	
		Tenses	

3.5 Summary of the Research Methodology

In summary, this research was undertaken under a case study methodology in one of the fledgling international standard school involving four teachers and students. To collect the data, observation and interview were used to keep the validity of the research. The data from all instruments were then analyzed by comparing them to result of the final conclusion. Using the framework of meaning negotiation strategy, the teachers and the students were analyzed to discover the problems of meaning negotiation in science classroom.

3.6 Conclusion

This chapter has reviewed a concise account of the methodology underpinning the present study, including research design, site and participants, instruments and data collection procedure, data analysis as well. The next chapter will be concerned with data analysis and discussion based on the video records from each instrument.