CHAPTER III RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research method covering the research questions, the design, procedures for data collection, and data analysis. The present study employs one-group-pretest-posttest design as the basis through which the students' realization of communication strategy was identified before and after the training (treatment). The data collection procedures include elicitation tasks for communication strategy realization, treatment, observation, and interview. The data were analyzed by using qualitative and quantitative approaches.

3.2 Research Questions

The present study investigates the effects of strategy training on the realization of communication strategies and the students' responses to the training. These research problems are formulated in the following questions:

- 3.2.1 What are the effects of strategy training on the realization of communication strategies in terms of:
 - a. linguistic features of each communication strategies used by the students?
 - b. frequency of occurrence of communication strategies used by the students?
 - c. level of speech comprehensibility?
 - d. consciousness of the strategies used?

3.2.2 What are the students' responses toward the strategy training in terms of:

a. the students' participation in the classroom activities in while-training

session?

b. the students' opinion on the strategy training implemented in the class?

3.3 Research Design

This research is largely experimental; however, some descriptive qualitative measures

are also employed to enrich the results. This research employs one-group-pretest-and-posttest

design as the basis, which was conducted through 3 steps. First, the students were tested to

label photos of daily objects. After that, the students were asked to describe unknown object

in order to elicit communication strategies. Second, the students were trained to be aware and

to be able to use the twelve targeted communication strategies for achieving communicative

goals. The students were also taught grammar and vocabulary aspects required for realizing

the use communication strategies. The third step is similar to the fist, i.e. the students were

tested to label photos of daily objects, then, they were asked to describe unknown objects in

order to elicit communication strategies after the treatment.

The research design is briefly depicted below:

T1 X T2

Note:

T1 = Obtaining the data of the realization of communication strategies before

the students participated in the strategy training (pretest).

 $X = \text{treatment which consists of 6 meetings} (X_1 X_2 X_3 X_4 X_5 X_6)$

T2 = Obtaining the data of the realization communication strategies after the

students had participated in the strategy training (posttest).

The effects of strategy training on the realization of communication strategies are analyzed in terms of linguistic features, the frequency of occurrence, level of speech comprehensibility, and consciousness of the strategies used.

This study is also designed to explore the students' responses to the strategy training. For this purpose, qualitative descriptive design was used through observation and interview.

3.4 Data Collection

Data of the present study were collected through several strategies based on the types of data required for answering the research questions. This section outlines the types of data, the subject of research and the collection procedures.

3.4.1 The Types of Data

This study reveals two major types of data. The first type of data is concerning the students' realization of communication strategies. The data were obtained before and after training. The students' realization of communication strategies were recorded, transcribed, coded, and labeled based on the twelve types of communication strategies. The second type of data is concerning the students' responses to the strategy training, which were obtained through observation and interview.

3.4.2 Subjects of the Research

The subjects of this research were the fifth-semester students of English Education Department, Teacher Training and Education Faculty, University of Lampung, participating in Intermediate Speaking Class. These students have passed two previous subjects, i.e. Speaking I and Speaking II. The number of the students in the class was 23 students.

3.4.3 Data Collection Procedures

Following are the procedures employed to collect data. As previously mentioned types of data, as previously mentioned type of data determine the collection procedures. Data on the realization of communication strategy were collected through elicitation tasks and treatment. Meanwhile, data on students' responses to the training were collected through observation and interview.

3.4.3.1 Elicitation Task

This procedure employed to collect data on realization of communication strategy to ensure that the students realized communication strategy. A vocabulary test was employed to identify objects unknown to the students, on the basis of which communication strategies were produced.

After identification of unknown objects, an elicitation task was conducted to get the students to produce communication strategies. This elicitation task was applied both prior to treatment (as pretest) and after the treatment (as posttest).

3.4.3.1.1. Vocabulary Test

One of the features of communication strategies is problematicity. Strategies are adopted by second/foreign language learners when problems in either learning or production are perceived and may interrupt communication (Tarone, 1983a; Bialystok: 1990). In order to make sure that the students had problem of labeling/naming the objects, the vocabulary test was used. The students were asked to label or to name the 48 daily basis objects because the objects could possibly be found in the students' surroundings; however, they might have the problem in labeling/naming the objects in English. In order to maintain the students'

consistency in using communication strategies, this test was done by the students before and after training. In other words, the students should describe the objects whose names are unknown. The test was enclosed in appendix 1.

3.4.3.1.2 Communication Strategy Elicitation

The data concerning the realization of communication strategy were obtained from pretest (before training) and posttest (after training). In each of these elicitation sessions, the students were asked to describe unknown objects through which a communication strategy might be elicited. The students were asked to speak for about 10 minutes.

3.4.3.2. The Treatment

The strategy training (the treatment) is basically an explicit classroom instruction directed at learners regarding their language learning and language use strategies, and is provided alongside instruction in the foreign language itself (Cohen, 1998). There have been a number of studies concerning communication strategy instruction which confirmed that communication strategy is teachable (see e.g. Tarone, 1984; Willem, 1987; Dörnyei, 1995, Maleki, 2007, 2010; and Nakatani, 2005, 2010). The main goal of the training is to make the students aware of the potential nature of communication strategies and make them able to use the strategies to overcome communication problems.

In the present study, the treatment was conducted by teaching the students to be familiar with and to be able to use 12 targeted communication strategies. The treatment was conducted in 6 meetings, with each lasting 90 minutes. Table 13 presents the 12 targeted communications strategies that might enable students to overcome communication problems.

Table 13 Twelve Targeted Communication Strategies

No.	Name of Communication	Definitions of Communication Strategies
	Strategies	
1	Approximation	The speaker uses a single TL vocabulary item or structure
		which shares enough semantic features in common with
		the desired item. In other words, the speaker mentions a
		more general word (i.e. "it is made of soil" rather than "it
		is made of clay") than the specific one.
2	Circumlocution	The speaker describes the properties of the object instead
		of using appropriate TL item. The speaker gives the
		characteristics of the object like shape, color, size, etc.
3	Exemplification	The speaker attempts to maintain the communication by
		exemplifying the intended meaning. The speaker give an
		example of the object being described.
4	Comparison	The speaker compares the object being described with
_	*** 1.2.	other object sharing common semantic features.
5	Word Coinage	The speaker replaces an L2 item with an item made up
		from L2 form. The speaker creates new word that us not
		fully accepted in the target language.
6	Borrowing/Code-Switching	The speaker switches in L1. The speaker uses native
_		language to make his/her speech understood.
7	Foreignizing	The speaker uses non-L2 form but adapts it to make it
	7	appear like an L2 form.
8	Repetition	The speaker repeats information what he/she has said
		previous previously.
9	Non-verbal	The speaker resorts to non verbal such as mime, gestures,
10	<u> </u>	facial expression, drawing, etc.
10	Avoidance	The speaker simply doesn't talk about the concept for
4.4		which the TL item is not known
11	Time-stalling Device	The speaker stops in mid-utterance but then continues to
		talk.
12	Appeal for Assistance	The speaker appeals for assistance with interlocutor.

The treatment was broadly divided into three steps, i.e. pre-training, while-training and post-training as depicted below.

Step1: Before Training:

- a. Determining the subjects of the research
- b. Conducting vocabulary test in order to ensure that English labels of the items were unknown to the students
- c. Listing the photos of the objects that were unfamiliar to each student
- d. Asking the students to sit in semi-circle formation
- e. Asking one student, as the speaker, to stand up in the center

- f. Giving the speaker 2 photos of objects whose name were unknown
- g. Asking the speaker to describe the objects in the photo in about 10 minutes
- h. Asking the other students to listen to the speaker's description
- i. Asking the students (the listeners) to assess the comprehensibility of the speech based on the checklist given
- j. The researcher used audio-visual aid to record the students' speech and other activities of describing the unknown objects

Step 2: While-training Session

In this stage, the teacher (researcher) taught the students what communication strategies are and how the 12 targeted communication strategies are used. The teacher also explained other related elements such as vocabulary and grammar. The training was conducted in 6 meetings, each lasting 90 minutes. In every meeting 3 or 4 students were invited to describe unknown objects. Following is brief description of each meeting. The lesson plan is enclosed in Appendix 8.

Lesson 1

The students listened to dialogue of the lost object entitled

"Scarf" The students identified the communication strategies used by the speaker. The students were, then, asked to describe unknown objects (previously identified in the pretest) and to practice using the communication strategies.

Lesson 2

The students listened to dialogue of the lost object entitled "A Stolen Briefcase". The students identified the communication strategies used by the speaker. The students were, then, asked to describe unknown objects (previously identified in the pretest) and to practice using the communication strategies.

Lesson 3

The students listened to monologue entitled "Selecting Bicycle". The students identified the communication strategies used by the speaker. The students were, then, asked to describe unknown objects (previously identified in the pretest) and to practice using the communication strategies.

Lesson 4

The students listened to dialogue of the lost object entitled "Signs Used by Gypsies". The students identified the communication strategies used by the speaker. The students were, then, asked to describe unknown objects (previously identified in the pretest) and to practice using the communication strategies.

Lesson 5

The students listened to tape dialogue of the lost object entitled "Brain". The students identified the communication strategies used by the speaker. The students were, then, asked to describe unknown objects (previously identified in the pretest) and to practice using the communication strategies.

Lesson 6

The students practiced working in pairs on information gaps tasks "Looking for an Apartment and Roommate". The students were, then, asked to describe unknown objects (previously identified in the pretest) and to practice solving the difficulties they encountered during the performance.

Step3: After Training

- a. Conducting vocabulary test in order to ensure that the English labels of the items were unknown to the students
- b. Listing the photos of objects that were unfamiliar to each student
- c. Asking the students to sit in semi-circle formation
- d. Asking one student, as the speaker, to stand up in the center
- e. Giving the speaker 2 photos of objects whose names of the item were unknown
- f. Asking the speaker to describe the objects in the photo in 10 minutes
- g. Asking other students to listen to the speaker's description
- h. Asking the students (the listeners) to assess the level of comprehensibility using the checklist/form available
- i. The researcher also assessed the level of comprehensibility using the checklist/form
- j. The researcher used audio-visual aid to record activities done during the process of meaning negotiation.
- k. The researcher gave the record of the students' speech to another lecturer to check the level of speech comprehensibility.

 The researcher transcribed the students' speech and identified the communication strategies

3.4.3.3 Observation

The students' activities were audio and video recorded to collect two types of data, i.e. realization of elicited communication strategies and identification of students' responses to the training. The verbal data were transcribed, coded, and categorized based on the 12 typology of communication strategies. The video recording provides more varied data that were used to refine the audio-recorded data and to examine the students' participation in the classroom during the treatment.

3.4.3.4 Interview

Interview was conducted to find the data about the reasons for the students to choose certain communication strategies and the benefit of strategy training to the students. A set of questions was developed on the basis of the previously collected data in a grounded theory (see Creswell, 1998). Two areas of concern were addressed through (1) questions formulated to further explore the realization communication strategies obtained from the students' speech transcription, and (2) the questions developed in order to find the students' respond to the strategy training.

Twelve questions were developed to ask the students' reasons for choosing a particular communication strategy. The data of the interview were recorded, transcribed, categorized on the basis of the type of communication strategies used by the students. There are two other questions developed to explore the students' responses to the strategy training. The data concerning the students' responses were recorded, transcribed, and categorized on

the basis of the type of responses the students gave. The average time for interviewing each student spent for about 10 minutes. The interview guide is enclosed in appendix 7.

3.5 Data Analysis

The data analysis was based on the types of data collected. First, data on the realization of communication strategies before and after treatment were analyzed to examine the effects of the treatment. Identification and classification of the communication strategy were done qualitatively, while sores concerning the realization were examined quantitatively. Second, data from observation and interview were examined qualitatively in comparison with the quantitative procedures.

3.5.1. The Realization of Communication Strategy Before and After the Treatment

Communication strategies realized before and after treatment were identified from the spoken description made by the students, to be followed by classification of communication strategies previously proposed. The development in the realization of the communication strategies, if any, is examined on the basis of four criteria, i.e. linguistic features, frequency of occurrences, level of speech comprehensibility, and consciousness of the strategies used. The quantitative progress with regard to frequency of occurrences, number of circumlocution and level of speech comprehensibility is latter examined by means of matched t-test, the formula of which is

$$t = \frac{Md}{\sqrt{\frac{\sum x^2 d}{n(n-1)}}}$$

Note:

Md = mean of before – after treatment

xd = deviation of each subject (d-Md)

 $\sum x^2 d$ = total square of deviation

N = number of student

3.5.1.1 The Linguistic Features

The data on the realization of communication strategies before training and after training were categorized into 12 targeted communication strategies, i.e. approximation, circumlocution, exemplification, comparison, word coinage, borrowing/code switching, foreignizing, repetition, non-verbal, avoidance, time-stalling device, and appeal for assistance. The linguistic features of each type of communication strategies were investigated in terms of the use of use of synonymy, hyponymy, sub-class, antonymy, material, locational, elaborated features, color, shape, functional, and size.

3.5.1.2 The Frequency of Occurrence

The students' realization of communication strategies before training and after training was tabulated to find the percentage of the occurrence of each communication strategy. The percentage was found from the number of students using a particular communication strategies divided by the total number of students in the class. From the data, there were three kinds of information were obtained, and latter compared statistically using matched t-test (before and after treatment): the frequency occurrence of communication strategies used by particular students, the number of students using particular communication strategies, and the number of circumlocutions used by the students. Research on the type of communication strategies in terms of frequency have been conducted by previous researchers (see e.g. Dörnyei, 1995; and Ting, 2008).

3.5.1.3 Level of Speech Comprehensibility

The student's speech was measured in terms of the level of comprehensibility in order to know how easy it was to work out what the student was talking about (see Littlemore, 2003). Comprehensibility is defined as the listeners' perception of how easy or difficult the utterance is for them to understand (Kennedy & Trofimovich, 2008). The form to assess the level of comprehensibility was adapted from several experts in language testing (see e.g. Harris, 1974; Underhill, 1987; Heaton, 1988; and Littlemore, 2003). The comprehensibility was assessed by three raters including the students (all members of the subjects) serving as the first rater (R1), the lecturer (the researcher) serving as the second rater (R2), and another lecturer serving as the third rater (R3) was chosen based on the capability and commitment of doing the job. The increase in the level of speech comprehensibility before and after strategy training was examined statistically using matched t-test.

3.5.1.4 Consciousness of the Strategies Used

Consciousness of the strategies used was examined based on the principle of awareness (consciousness), one of the three main features of communication strategies as discussed previously in chapter 2. The data on the students' consciousness of the strategies used were obtained from interview asking the students' reasons for selecting particular type of communication strategies. The data were, then, analyzed based on the type of communication strategies.

3.5.2 Students' Responses to the Strategy Training

In this present study, the data concerning the students' responses toward the strategy training were classified into two main categories. First, data informing students' participation

in the classroom activities in while-training session were obtained from the observation notes and video recording. The observation notes were prepared to report all activities students were doing in the class. The video recorded data served to enrich the analysis.

Second, the data informing the students' opinion about the benefit of strategy training implemented in the class were obtained from interview. The opinion was identified and categorized qualitatively. The most common opinion on the implementation of strategy training was revealed.

3.6 Summary of Chapter Three

The method described in the present study described in this chapter is developed to examine the effects of strategy training on the realization of communication strategies. The effects were examined both quantitatively and qualitatively. The quantitative procedure explores the development of the realization of communication strategies on several aspects that could be quantified, both descriptively and inferentially. The qualitative procedure, on the other hand, explores the aspects that are qualitatively in nature. The discussion in this chapter will be the basis for data analysis to be presented in Chapter IV.