

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

The purpose of this chapter was to present an account of: (i) population and sample, (ii) research design and procedures, (iii) research instruments, (iv) data collection, and (v) data analysis.

#### **3.1 Population and Sample**

The population of this research comprised 300 students, who enrolled in the course “0001102 English for Communication 1” in the second semester of the academic year 2009 at Loei Rajabhat University. One section of 38 students majoring in Public Health, the faculty of Science and Technology, was drawn to be the sample of the study using the simple random technique. In the final stage, only 20 subjects from this group who took all the tests involved and attended the whole thirty hours training sessions were included in the study. These subjects were found to have low English proficiency (level 5) as measured by English Language Learning and Instructor System (ELLIS). (see Appendix F)

#### **3.2 Research Design and Procedures**

This study aimed to study LRU students’ awareness of their English pronunciation problems, and to investigate the effect of the pronunciation training on learner’s confidence and speaking skill. To achieve these purposes, students were administered the pronunciation test, the questionnaires and an informal interview. The pronunciation test and the questionnaires were tried out initially with a group of first year students who were not the subjects of the study in order to check the validity of the instruments. This study was conducted through the stages of ‘plan’, ‘act’, ‘observe’ and ‘reflect’. At the stage of planning, the researcher and other instructors with the information on the students’ pronunciation problems, lessons on the segmental and supra-segmental aspects were planned. The content and the lesson plans were later validated by two experts in the field of English language teaching.

The stages of ‘act’, ‘observe’ and ‘reflect’ occurred during the training sessions which lasted 12 weeks of 3 hours each week. The detailed information of research procedures during these stages were described as follows:

Week 1: The questionnaires were distributed to students and returned in 20 minutes. The questionnaires were administered to students before starting the training in order to find out if they have awareness toward pronunciation or not. The students then took the pronunciation test, and followed by an informal interview in order to measure their English pronunciation ability and speaking skill. At this stage, the researcher and two qualified ESL instructors at Loei Rajabhat University with the information on the students’ pronunciation problems, planned pronunciation lessons on English consonants, vowels, stress, and intonation. The lesson plans and content later check by experts in the field of English language teaching.

Week 2-Week 11: The training was conducted in thirty hours. The purposes of the training were (i) to raise the awareness of pronunciation problems using the activities (ii) to pronounce words correctly and be familiar with English consonants, vowels, stress, and intonation. The students attended three hours a week for each lesson with two qualified ESL teachers and one native English teacher. Each training session involved articulation of sounds, certain consonants which consisted of /s/, /z/, /θ/, /ð/, /ʃ/, /ʒ/, /tʃ/, /f/, /v/, /l/, /r/, diphthongs, word stress, sentence stress, and intonation respectively. (see Appendix J)

At this stage, an observation was made during each lesson in order to find out how well the students had learnt. Meanwhile, the students reflected their own performance on their own pronunciation problems by writing a reflective report for 15 minutes at the end of each lesson. The purpose of the reflective reports was used to record the events, the students’ awareness on their pronunciation problems, their reaction (like or dislike on the lesson) and their awareness on learning pronunciation.

Week 12: The parallel form of questionnaires, the pronunciation test, and an informal interview were again administered to the students in order to investigate the effect of pronunciation training on students’ speaking skill.

The scores from the tests and the results from the questionnaires which were administered before and after the training sessions were compared to see if the pronunciation training had an effect on the subjects’ improvement or not.



3.3 Research Instruments

The research instruments used in this study included (i) the questionnaires, (ii) the pronunciation test, (iii) the reflective report, (iv) an interview guideline, and (v) the observation checklist form. These can be explained in more details as follows:

3.3.1 Questionnaires

Two forms of the questionnaires were administered to the subjects of this study. The questionnaires were adapted from Thupateme (2006). The purposes were to find out about the students’ attitude before and after the pronunciation training. The questionnaires were conducted based on 5 level of Likert Scale (strongly agree, agree, not sure, disagree and strongly disagree). They were translated into Thai in order to facilitate students’ responses and to avoid misunderstanding. The questionnaires consisted of 28 questions and were grouped into six sections. They included:

- 1. The participants’ self evaluation of the awareness towards their own pronunciation
- 2. The participants’ awareness towards the methods of learning pronunciation
- 3. The participants’ awareness towards the importance of pronunciation
- 4. The participants’ expectation of an English teacher
- 5. The participants’ awareness of the advantages of good pronunciation
- 6. The participants’ awareness towards factors that help learners have good pronunciation.

These two forms of questionnaires could provide teachers with knowledge on the students’ awareness towards pronunciation problems as well as diagnosis on students’ strengths and weaknesses of English pronunciation and speaking skill.

In this part the students were asked to check the level of their attitudes on scale level of 1-5 as follows:

Strongly agree	5	Very High
Agree	4	High
Not sure	3	Moderate

Disagree	2	Low
Strongly disagree	1	Very Low

And a mean score was derived from the following range responses.

Strongly agree	4.50 - 5.00
Agree	3.50 - 4.49
Not sure	2.50 - 3.49
Disagree	1.50 - 2.49
Strongly disagree	1.00 - 1.49

**3.3.2 Pronunciation Test**

There were two sets of pronunciation test. They included:

**3.3.2. (a) Word List Reading**

Forty eight word list (Dale & Poms, 1994) was selected to read and record using the wave file program and transformed into MP3. The MP3 files were used to cross-check and rank the most mispronounced words among Loei Rajabhat University. Each correct pronounced word was given one mark.

**3.3.2. (b) Listening Dictation**

There were three parts. Part A: students were asked to circle 60 words list of vowel and consonant sounds. Part B: students were asked to circle the words they heard to complete the sentences. Part C: students were asked to mark on the stressed syllable they heard from 60 words. Students answered 125 test items, each correct answer was given one mark.

**3.3.3 Reflective Reports**

The participants were asked to write the reflective reports. The purpose of using the reports was to inform the teacher not only students’ problems on pronunciation training, their awareness on their learning of pronunciation, but also learning activities during each lesson. The reflective reports were grouped to explain details as follows: (i) problems of pronunciation learning (ii) learning progress (iii) awareness of pronunciation problems (iv) attitudes towards pronunciation training and (v) the effectiveness of the pronunciation training. Question guided for the reflective reports were presented in Appendix E.



### **3.3.4 An Informal Interview**

The purpose of an interview was to test the students' speaking skill. All participants were interviewed by external raters with different questions before and after the pronunciation training. The question concerned mostly with students themselves, their families, their home, and their school lives. The question included two parts: (i) Information questions and (ii) Yes-No questions (see an Interview Guideline in Appendix C).

### **3.3.5 Observation Checklist Form**

The purpose of using the observation form was to check students' performance on speaking skills before and after the pronunciation training. The observation checklist form used in this study was adapted from the observation checklist created by Wongsothon (1996). They were three aspects which included: (i) pronunciation, (ii) fluency, and (iii) gesture. They were scored from one to five marks for each aspect and total marks were fifteen. The scores associated in each aspect were presented in Appendix D.

## **3.4 Data Collection**

The data were collected during the second semester of the academic year 2009. Firstly, the results from two sets of the questionnaires administered to the students before and after the pronunciation training were obtained in order to find out the subjects' awareness towards pronunciation learning. Secondly, the scores from two forms of the pronunciation test administered to the subjects before and after the pronunciation training were obtained. Thirdly, the scores from two interviews administered before and after the pronunciation training were also obtained to check the subjects' improvement on speaking skill using observation checklist form to rate the proficiency of students' speaking skill by external raters. The interviews were also tape-recorded for further analysis. Finally, the information obtained from the reflective reports was collected in the end of each lesson. The purpose of collecting the data from the reflective report was to keep record on the effect of the pronunciation training on the subjects' awareness of pronunciation problems, the effect of the pronunciation training on students' confidence and their English speaking skill.



### 3.5 Data Analysis

This study was one group experimental design. The computer SPSS for window program was used to determine the percentages, mean ( $\bar{x}$ ), standard deviation (S.D), and t-test. Both quantitative and qualitative data were analyzed as follows:

#### 3.5.1 Quantitative Data

3.5.1.1 To find out about the participants' awareness towards pronunciation learning, the results from the two forms of questionnaires were analyzed by mean ( $\bar{x}$ ), standard deviation (S.D.) using Statistic Package for the Social Sciences (SPSS).

3.5.1.2 To determine the improvement of the participants' pronunciation and speaking skill, the scores obtained from the pronunciation test and information interview administered before the training sessions and those obtained after the training were analyzed by mean ( $\bar{x}$ ), standard deviation (S.D.) and t-test.

#### 3.5.2 Qualitative Data

To provide the participants' feedback on the effect of the training, the information obtained from the reflective report was categorized into five subgroups of issues as follows: (i) problems of pronunciation learning (ii) learning progress (iii) awareness of pronunciation problems (iv) attitudes towards pronunciation training and (v) the effectiveness of the pronunciation training. These five main issues were used to support the above findings.