CHAPTER III

RESEARCH METHODOLOGY

This study was designed to investigate pronunciation teaching of English consonant sounds that are problematic to Grade 2 students at Phichit Inter School by using minimal pairs. The method employed was an experiment.

Chapter three explains methodology of this study. It contains information about participants, research tools, procedures, and data analysis.

Participants

The research participants were two classes of Grade 2 students at Phichit Inter School, a private school in Phichit, Thailand. All Grade 2 students are required to study English for 4 hours per week in the second semester of the academic year 2006. The sample size in this study consisted of 40 students in two classes which were drawn from the total number of 69 students. It was selected purposively as the sample of the experiment. Both the experimental group and the control group were previously divided into 2 levels of English learning ability: highly-proficient students were those students who got grade 4 in English course taken the semester before, and low-proficient students were those who got grade 1 or 1.5 in the same course, on the basis of their final English grade in the first semester of the academic year 2006. The experimental group was chosen from Grade 2/1 class for 20 students, whereas the control group was chosen from Grade 2/2 class for the same number of students.

Research Tools

The Lesson Plans

The lesson plans which were used to teach participants were constructed in line

with the purpose of the study. As an English teacher, one of the researchers found that his students had trouble in pronouncing some English consonant sounds since there are no such segmentals in their native Thai language, so most students have misconception about those sounds. They always replace them with their L1 sounds that seem similar to those English sounds.

The extremely problematic sounds which were observed from the students are /r/, /v/, /z/, /ð/, /ʃ/, and /θ/. In addition, Mora's article named "Using Minimal Contrast Pairs for Teaching Pronunciation" (1999), gives a list of common minimal pairs that can be used to help students learn about problematic sounds better such as tank-thank, tin-thin, taught-thought, day-they, dough-though, sin-thin, sank-thank, true-through, etc. Also, in Power's Thai language background (2007) stated that there are some common error derived from English sounds, for example, day-they, wet-vet, sin-thin, light-right, cherry-sherry, etc. Consequently, these words were adopted into the lesson in this study, accompanied with some other problematic minimal pairs observed by the researcher. Therefore, the lesson was composed of eight sets of minimal pairs which are based on problematic sounds for the target group. (see appendix B)

The lesson plans were conducted to reach the target group by following the analytic-linguistic approach along with listening discrimination practice. Theoretically, the best way to teach young learners is teaching them how to imitate and have exposure to the target language. The young learners are good imitators (Ellis, 1997). So, the lesson plans used were followed by encouraging students to imitate the sound heard and discriminate the minimal pairs from their listening practice. (see a sample lesson plan in appendix C)

The Tests

Both pre-test and post-test were identical. The tests were constructed choosing five words from each initial consonant sounds. They composed of 30 words. Each participant needed to be assessed by pronouncing those words.

Unfortunately, the pre-test could not be successful since those words were unfamiliar to the participants; all of them could not correctly pronounce the words from the pre-test word list at all. Therefore, the researchers did not hold the pre-test, and it was assumed that the ability of both the experimental group and the control group were in the same level. It meant that the English competency of the participants were equal and started from zero score as well. Therefore, the researchers dealt with the only test or post-test that was administered at the end of the experimental study after 16 periods of instruction. So, it was used as a tool to assess how well the participants improve their pronunciation.

Procedure

Teaching correct pronunciation through minimal pairs for 4 periods per week in the second semester was the main instructional technique. The details of procedure are informed accordingly.

First, the researchers studied the related articles and research both from the Internet and previous studies published, especially on language teaching. The researchers found some interesting ideas and contents which could be applied to the study afterwards.

From the past experience of the researchers, one of the researchers, Booranapong Kosenarak, figured out 6 problematic English consonant sounds from his own students, which affect mispronunciation all the times. Those sounds are /r/, /v/, /z/, /ʃ/, /ð/, and /θ/ sounds. The sounds have been also shown in many researchers' studies, e.g. Ted Power (2007), Jill Kerper Mora (1999), Kanoksilapatham et al. (1987). Since the target students were young and had some limitations in learning a foreign language, it could be too difficult for them to acquire it within a few weeks. So, the researchers found out 66 word list of minimal pairs which were problematic to the participants for eight sets of initial English consonant sounds. (see appendix A)

According to the six initial consonant sounds mentioned above, the researchers selected five words from each problematic initial consonant sounds for the tests. There were 30 words together when the pre-test and post-test were constructed to be used as a means to assess the participants' improvement in learning the target sounds. It comprised of five words for each of the following sounds.

1. $/l/$ and $/r/$

   light-right

2. $/f/$ and $/v/$

   fan-van

3. $/s/$ and $/z/$

   Sue-zoo

4. $/t\int/$ and $/\int/$

   chop-shop

5. $/d/$ and $/ð/$

   day-they

6. $/t/$ and $/\theta/$

   tin-thin

The technique used in teaching the target sounds was followed by the analytic-linguistic approach along with listening discrimination practice, as mentioned earlier in the lesson plan section.

After the research tools were completed, it needed to be evaluated for its validity and reliability. They needed to be checked for content, validity and reliability, so they were submitted to three experts; Assoc. Prof. Dr. Kriengsukdi Syananondh, Asst. Prof. Dr. Kaewta Saleepote, and Dr. Sudsuang Yutdhana. They are teachers of English in the Faculty of Humanities, Naresuan University. After that the research tools were rechecked and revised based on suggestions from the advisor (Asst. Prof. Dr. Payung Cedar) and the experts.

The teacher taught the minimal pairs technique to the experimental group using analytic-linguistic technique and listening discrimination practice as you can see in the lesson plans in appendix C. Minimal pairs are useful for teaching individual phonemes (sound units) and may be used to promote accurate listening and good oral production and to tune the ear to discriminate between two similar sounds. The three main points of a pronunciation lesson are imitation, explanation and drill based upon the principles recommended by Carruthers (online). In addition, the participants had more opportunities to practice their listening about those words' pronunciation through some kinds of activities such as minimal pair bingo (see appendix C). Whereas the control group was taught using the traditional technique, that is, the participants remembered all the words and their pronunciation through every single sound of the words. If they could remember those words, they might pronounce them correctly.

At the end of the treatment, the participants were asked to pronounce the target words learned one by one, and there were three judges to evaluate each word for those participants. Two of the judges were the researchers themselves, and one was a former graduate of English from the Faculty of Humanities, Naresuan University, with approval of a foreign teacher who is teaching English at Phichit Inter School. If at least two out of the three judges agree that a participant's pronunciation was correct, the participant would receive a score for that word. In contrast, if they said that it was incorrect, the participant would receive a zero for that word instead (see students' pronunciation checklist in appendix D).

Data Analysis

The test scores were calculated and computed using the computerized statistical package for social science (SPSS). The statistical devices included arithmetic mean, standard deviation, percentage and the Analysis of Variance (ANOVA) in order to compare the scores of their improvement in pronunciation for the target words between the experimental group and the control group. The results are reported in the next chapter.