Chapter III

Research Designs and Methods

This study was conducted in order to survey the English language reading abilities and reading strategies of second-year Payap University students. The research designs and methods were discussed as follows:

1. The population and the sample

2. The research instruments

3. Data collection

4. Data analysis

1. The population and the sample

The population was the second-year Payap University students who were studying the AE 201 course in the first semester of the 1998 academic year. They were from five different faculties: Humanities, Social Science, Science, Business, and Accountancy Finance and Banking. The total number was 880 students. The sample was drawn from the population by using stratified random sampling. Twenty samples were selected from each faculty. The total number of samples was 100. The samples were asked to take the reading comprehension test and to complete the questionnaire after taking the test immediately. Thirty samples were randomly chosen to be interviewed.

Prior to initiating the main study, a pilot study was conducted with fifty students who were stratified randomly selected from the five faculties to take the reading comprehension test, and the questionnaire. Six students were interviewed.

2. The research instruments

There were three kinds of research instruments: a reading comprehension test, a questionnaire, and an interview.

2.1 The reading comprehension test

The reading comprehension test was used to measure students' reading abilities in the scope of the four reading comprehension skills. They were identifying main ideas, making inferences, making predictions, and drawing conclusions. The test format was a multiple-choice with four alternative choices. They were 24 questions divided into four groups of the reading comprehension skills. The difficulty level of the texts was the same as what the students had studied in AE 201. Time allowed for the reading comprehension test was 60 minutes. Regarding marking scheme, one point was given to a correct answer, and zero was given to an incorrect answer, no answer, or more than one answer per a test item. The complete reading comprehension test was shown in Appendix B.

Stages of constructing and developing the reading comprehension test

1. Analyze course description and objectives of AE 201.

2. Search and study textbooks, documents and research about how to construct a test.

3. Select three unseen texts which had the same difficulty level as the texts used in AE 201 course.

4. Construct the reading comprehension test.

5. Request specialists to check the appropriateness of the reading comprehension test.

6. Conduct a try out with 50 students who came from five different faculties.

7. Find out Difficulty Index (p value), Item Discriminability Index (d value), and reliability by using Kuder-Richardson formula 20 (K-R20).

8. Keep the test items which had Difficulty Index (p value) between 0.20-0.80 and Item Discriminability Index (d value) 0.20 up which were considered appropriate difficulty and discriminability (Jamornmarn, 1987, p. 74; Srisaart, 1992, pp. 79-80; Wiboonsri, 1996, p. 145).

9. Rewrite the test items which did not meet the required Difficulty Index (p value) and Item Discriminability Index (d value).

2.2 The questionnaire

The questionnaire was adapted from Cohen's (1990) reading strategies. It was used to investigate students' reading strategies while they were doing the reading comprehension test. The questionnaire consisted of ten main questions which were divided into fifteen sub-questions. Likert scale was used as a rating scale for each reading strategy (Arreola, 1998, on-line serial; Ordinal Level, 1998, on-line serial). To avoid language barrier, Thai version questionnaire was created and given to the samples. Both the Thai and the English version can be seen in Appendix C. The subjects were asked to complete the questionnaire immediately after taking the reading comprehension test.

Stages of constructing and developing the questionnaire

1. Study Cohen's (1990) reading strategies.

2. Construct the questionnaire by using Cohen's (1990) reading strategies as a model.

3. Request specialists to check the appropriateness of the questionnaire.

4. Conduct a try out with the same group of students who took the reading comprehension test before.

5. Rewrite the questionnaire.

2.3 The interview

The interview was used to investigate the reading strategies students used in obtaining the correct or the best answers. A semi-structured interview consisted of fixed questions and open-ended questions was conducted to find out how students chose the answers. The fixed questions were shown in Appendix D. The interview was given after the students had finished the questionnaire.

Stages of constructing and developing the interview

1. Study theories of reading strategies.

2. Set fixed questions to be used in the interview and a criteria for judging the students' answers.

3. Do tape-recording and note-taking while conducting the interview.

3. Data collection

The data was collected from the three instruments: the reading comprehension test, the questionnaire, and the interview. The reading comprehension test was given to six classes of different numbers of students at different times within two days. The number of students in each class was the following: 11, 23, 20, 14, 22, and 10. In these six classes, there were altogether 20 students who came from each faculties. The questionnaire was given to the same groups after they finished taking the reading comprehension test

immediately. Regarding the interview, thirty subjects randomly selected from the six classes were interviewed after finished the questionnaire.

4. Data analysis

The percentage, mode, and mean were used to analyze the data. Students' reading abilities was calculated on the percentage of the total scores. Mean of percentage scores was used to describe students' reading abilities in each reading comprehension skill. The numbers of reading strategies students used were analyzed by using mode. Percentage and mean of percentage were used to analyze the numbers of reading strategies students used in obtaining the correct or the best answers. The results of the interview were classified into three groups: students who totally used the proper reading strategies, students who partially used the proper reading strategies, and students who simply used random guessing (see Appendix F).