Chapter III

Research Designs and Methods

This study was conducted in order to survey the business English reading problems and those factors related to the problems as they affect the reading comprehension of commercial students from four commercial schools in Amphur Muang, ChiangMai. The research design 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 first-year higher level students at commercial schools who had previously taken the Tor Sor 012-013 courses in the 1998 academic year in four commercial schools in Amphur Muang, ChiangMai, Rajamongkol Technology College, ChiangMai Commercial College, Srithana Commercial College, and ChiangMai Vocational College. The total number of the population was 978 students. The sample was drawn from the population by using random sampling. Thirty students in each target school were drawn to take the reading comprehension test and to complete the questionnaire.

Prior to investigating the students' business English reading problems and the factors affecting their achievement and/or failure in reading business English texts, a pilot study was conducted with forty students from Lanna Commercial College in Amphur Muang, ChiangMai. These students had already taken the business English courses (Tor Sor 012-013) and had not been selected as the subjects in the study.

2. The research instruments

There were three different 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 investigate the students' problems in reading business English texts in the scope of five reading comprehenison subskills. The 27 questions were divided into the following:

1. Five questions in guessing meanings of unfamiliar words from context,

2. Five questions in recognizing general business vocabulary,

3. Five questions in determining the main idea,

4. Seven questions in identifying factual details within a text,

5. Five questions in inferring information from textual clues.

The constructed test in this study was based in part on the curriculum and in part on the textbooks.

The reading subskills which appear in both textbooks and course description and objectives set by the Vocational Education Department of Thailand revised in 1995 were chosen to be studied. The difficulty level of the texts was the same as those which the students had learned in Tor Sor 012-013. The test format was multiple choice with four alternative choices.

The time allowed for the test was 50 minutes. Regarding the marking scheme, one point was given to a correct answer; and a zero was given to an incorrect answer, no answer, or more than one answer per test item. The complete reading comprehension test and the table of specification with the answer key, except the answer sheet , are shown in Appendix C.

Stages of constructing and developing the reading comprehension test

1. Analyze the course description and objectives of Tor Sor 012-013 (Business English section 1- 2).

2. Analyze the business English texts used by the four target commercial schools in Amphur Muang, ChiangMai.

3. Select five English reading subskills (guessing meanings of the unfamiliar words, recognizing general business vocabulary for that level, determining main ideas, identifying factual details from the text, and inferring information from the text) which are considered as important skills for commercial students in order that they will be able to comprehend business English texts. These are the skills which appear in both the textbooks students use and in the course description of Tor Sor 012-013.

4. Search and study textbooks, documents, and research test construction.

5. Select three unseen texts/passages which had the same difficulty level as the texts used in Tor Sor 012-013 courses. This was done by asking business English teachers who teach Tor Sor 012-013 to evaluate text difficulty and writing questions examining the difficulty level of the vocabulary and the grammatical structure of those texts.

6. Construct the reading comprehension test.

7. Request two specialists to check the appropriateness of the reading comprehension test.

8. Conduct a try-out with 40 students from Lanna Commercial College who had taken Tor Sor 012-013 courses in the 1998 academic year and had not been selected as subjects of the study. The reliability is 0.88.

9. Find the Difficulty Index (p value), and reliability by using Kuder-Richardson formula 20 (K-R 20).

10. Keep the test items which had a Difficulty Index (p value) between 0.20-0.80 and Item Discriminability Index (d value) 0.20 up which were considered to be of appropriate difficulty and discriminability (Jamornman, 1987; Srisaart, 1992; Wiboonsri, 1996).

11. Improve 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 used to identify the five reading subskills (guessing meanings of the unfamiliar words, recognizing general business vocabulary for that level, identifying factual details within a text, determining main ideas, and inferring information from context) the students have difficulty in and the factors which affect students' achievement and/or failure in reading business English texts. The questionnaire was divided into two main sections: 1) student self-evaluation on problems in reading business English texts and 2) factors affecting the students' achievement and/or failure in reading business English texts. There were five main questions in the first section asking about the reading comprehension subskills which the students thought they had difficulty in. The second section asked about the factors which caused the students' failure in reading business English texts. It consisted of five subtopics: 1) learners, 2) teachers, 3) teaching techniques, 4) environments, and 5) teaching aids. The Likert scale was used as a rating scale for each difficulty and factor which the students encounter (Arreola, 1998, on-line serial;

Ordinal Level, 1998, on-line serial). To avoid the language barrier, a Thai version questionnaire was given to the samples. Both the Thai and the English versions are seen in Appendix D and Appendix E. The subjects were asked to complete the questionnaire as soon as they finished the reading comprehension test.

Stages of constructing and developing the questionnaire

1. Study English reading comprehension subskills, reading strategies, English reading comprehension factors, problems in reading from previous research studies.

2. Construct the questionnaire.

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

4. Conduct a try-out with the same groups of students who took the pilot reading comprehension test to determine content validity and reliability. (The questionnaires were given to the students as soon as they finished the test.)

5. Improve the questionnaire.

2.3 The interview

The interview was employed to investigate:

1. The business English teachers' teaching methods in teaching reading subskills.

2. The business English teachers' opinions about teaching aids and materials presently used in teaching business English reading.

3. The problems in teaching business English reading in the classroom.

Stages of constructing the interview

1. List questions about teaching techniques used in teaching reading subskills in class (guess at meanings of words from context, find the main ideas, identify the supporting details, recognize general business vocabulary for that level, and infer information from context).

2. List questions about teaching aids and materials used in teaching business English.

3. Set questions about problems in teaching business English reading in class.

4. Interview ten business English teachers at the four target commercial schools.

5. Take notes while conducting the interview with three English teachers from ChiangMai Rajamongkol Technology College, three English teachers from ChiangMai Commercial College, two English teachers from Srithana Commercial College, and two English teachers from ChiangMai Vocational College.

6. Group the data from the notes to find the frequency of each topic.

3. Data collection

Data was collected from the three instruments: 1) the reading comprehension test, 2) the questionnaire, and 3) the interview. The reading comprehension test was given to four groups of samples at different times within two days. There were thirty students in each group from four different commercial colleges as mentioned. The questionnaire was given to the same groups of the students, after they finished the reading comprehension test. Regarding the interview, ten business English teachers from four target schools were interviewed after the test and the questionnaire were conducted. Ten percent of the students who missed the class at that day did the test and the questionnaire the next day under the supervision of their teachers. The researcher talked to the supervising teachers and explained to them the meanings of the directions and the questions in the reading comprehension test and the questionnaire. This helps the teachers in giving the students a clear explanation before doing the reading test and the questionnaire.

4. Data analysis

Percentage and mean were employed to analyze the data from the reading comprehension test. The reading subskills the students had difficulty with were

studied. The test scores from the reading comprehension tests were classified according to the Vocational Education Department's criterion to find out at what level the students were. The mean adapted from Saengkaew (1995) was employed to analyze the data from the questionnaires in order to learn which English reading subskills students felt they had difficulty with and what factors affected their achievement and/or failure in reading business English texts. The results of the interview was interpreted by descriptive analysis.

The criterion employed to measure student ability in reading business English texts was adapted from the Vocational Education Department of Thailand (1995).

MARKS	GRADE	DEFINITION
90 - 100	A+	excellent
80 - 89	A	very good
70 - 79	B	good
60 - 69	C	average
50 - 59	D	poor
00 - 49	F	very poor

The criterion below was adapted to measure the students' business English reading difficulties.

MARKS	GRADE	ABILITY	DIFFICULTY	PROBLEM
90-100	A+	very high	have no difficulty	hardly have a problem
80 - 89	A	high	have very little difficulty	have few problems
70 - 79	B	quite high	have little difficulty	have several problems
60 - 69	C	average	have difficulty	have a number of problems
50 - 59	D	low	have much difficulty	have many problems
00 - 49	F	very low	have too much difficulty	have too many problems

Mean adapted from Saengkaew (1995):

The mean levels of the scores of statements regarding reading subskills that students think they have difficulty in are specified as follows:

Scale	Levels of difficulty	Mean range
1	have no difficulty	1.00 - 1.80
2	have little difficulty	1.81 - 2.60
3	have difficulty	2.61 - 3.40
4	have much difficulty	3.41 - 4.20
5	have too much difficulty	4.21 - 5.00

The mean levels of the scores of statements concerning student attitude, teacher language, teaching aids, teaching techniques, and environments are presented as follows:

Scale	Levels of preferences	Mean range
1	very little	1.00 - 1.80
2	little	1.81 - 2.60
3	average	2.61 - 3.40
4	a lot	3.41 - 4.20
5	the most	4.21 - 5.00

The mean level of the scores of statements concerning student reading strategies are presented as follows:

Scale	Levels of frequency	Mean range
1	rarely	1.00 - 1.80
2	occasionally	1.81 - 2.60
3	sometimes	2.61 - 3.40
4	often	3.41 - 4.20
5	very often	4.21 - 5.00