### **CHAPTER 3**

### METHODOLOGY

This chapter describes the process used in this study, from a statement of the original problem, through the development of a possible solution for students, to its evaluation by using questionnaire and students' performance.

## 3.1 Subjects

The subjects in this study were students who were enrolled in the first semester of the first year at Lampang College of Commerce and Technology (LCCT). These subjects had various language backgrounds. These subjects who were called "Paw War Chaw 1" students, were in 8 classes. One class was randomly drawn by simple random sampling. Scores on the proficiency test were used to group this sample into three categories: below average (0-15), average (16-30), and above average (31-45). The students for each group were randomly selected according to score on proficiency test. Ten students were asked to use the supplementary exercises on CD-Rom in the ISC. They were given a questionnaire to fill in after they practised these exercises.

### 3.2 Instruments

There are four kinds of instruments used in this project.

- A. Text Analysis
- B. Task-Based Framework
- C. Questionnaire
- D. Students' Performance

## A. Text analysis

Text analysis was used to find out which skills were absent and which skills were less focused in each unit so that these skills could be adapted in the supplementary exercises. The textbook used in this course is English 1 written by Somporn Sittichai (1998). This book is based on the principles of Communicative Language Teaching (CLT). There were twelve units in this book. To show the ineffective skills in the course book, the principles of text analysis from Brown (1994:150-151) were used as the criteria to examine this textbook. The parameter consisted of: goals of the course, background of the students, approach, language skills, general content, quality of practice material, sequencing, vocabulary, general sociolinguistic factors, format, accompanying materials, teacher's guide.

## B. Task Framework for construction supplementary exercise in CD-Rom

To develop English learning, the supplementary exercises were organized according to the task framework and authentic material input. The task framework was designed based on the task-based approach (Tomlinson, 1998). The stages of Constructing Task Framework are study the characteristics of Task-based teaching, study the task components, design the task framework, choose the topic for the students to practise in the ISC, choose authentic materials related to the topic, use Authorware version 5.1 to save the exercises for students to use in the ISC.

# Table of Framework for supplementary exercises in CD-Rom

The framework was designed based on the four skills that integrated to each other. The Framework of Supplementary Exercise Construction

Units	Objectives	Skills	Activities	Evaluation
			1	
				7
			Co	

The exercises constructed according to the five topics; units of exercises, objectives of each skill, skills, activities of each skill and automatical evaluation by computer scoring system.

## C. Questionnaire

A questionnaire was prepared to elicit students' opinions after using the supplementary exercises in the ISC. The questions consisted of the following topics; skill development, relevance, cohesion, autonomous learning and ease of access.

The questionnaire was prepared to gather information about the effectiveness of the Supplementary Exercises on the CD-Rom and students' satisfaction in using CAI in language practice. The questionaire was designed by using a Likert scale. Students chose their answer by selecting the number on the scale. It was written in Thai –

English because students are in the first year of vocational level (Paw War Chaw 1 or grade 10). They have just finished from Mattayom 3 and their English reading ability is not fluent. The questions consisted of the following topics. (Chan and Korostoff, 1984;84).

There were two types of questionnaires: 1) used to evaluate the ability of using computer and CD-Rom, and 2) used to elicite self-assessment about language skills or information and attitude towards language learning.

Questionnaire 1 consisted of eleven items (6 about exercises, 2 about program design, and 3 about machine capability).

Questionnaire 2 was designed to ask about contents of the Supplementary Exercises (1 about objectives of unit, 2 about contents, 5 about listening skill, 7 about speaking skill, 6 about reading skill, and 3 about writing skill).

### D. Students' Performance

The improvement of Supplementary exercises depends on the score of the students' performance. The criterion used to measure the students proficiency in using supplementary exercises in CD-Rom is from the Vocational Education Department (1998). If the score is over 50, the exercises attain the unit objectives.

### 3.3 Data Collection

Data were collected through three steps. First, textbook was analysed based on the result of text analysis (Brown, 1994:150-151). Second, the supplementary exercises were constructed by using task framework and the results of text analysis, and finally,

the questionnaire was used after performing the tasks in to the CD-Rom to check student's satisfaction.

# 3.4 Data Analysis

- A. Scores from this placement test help teacher to place the students suit ably to their ability of learning English. (Appendix A)
- B. Frame work (Appendix B)
- C. The questionnaire was the tool to examine if the CD-Rom the supplementary exercises were effective and met the needs of the students. The MEAN was used to show students' opinion towards the supplementary exercises in CD-Rom. (Appendix C)
- D. Students' performance (Appendix D)
- E. The criteria was used to find the passing rate of supplementary exercises in CD-Rom (Appendix E)
- F. Textbook analysis (Appendix F)