CHAPTER 3

RESEARCH METHODOLOGY

This study is conducted to investigate the factors influencing the use of online reference databases among CMU undergraduate students, at the Central Library, Chiang Mai University. The study is designed and based on the quantitative process. This chapter will describe the research methodology used in this study in the following order.

1) Locale of the Study
2) Research Design & Instruments
3) Population
4) Data Collection
5) Data Analysis
6) Limitation

1. Locale of the Study

This study was conducted at the Central Library, Chiang Mai University. The respondents were undergraduate students of Chiang Mai University using online databases services at the Online Reference Databases Room, the second floor of the new building of the Central Library, Chiang Mai University during the second semester of the academic year 2004.

2. Research Design & Instruments

This study attempts to identify factors influencing the use of online references databases among CMU undergraduate students, at the Central Library, Chiang Mai University. It also aims to find out why online databases service has not been regularly used by the CMU undergraduate students at the Central Library, Chiang Mai University. As the majority of students in Chiang Mai University, the undergraduates have been selected as a population for data collection. Databases in this study are

categorized into 2 types which are multidisciplinary databases and subject-specific databases. Both of them will be analyzed in terms of their present status.

Questionnaires have been distributed to elicit data from the students, randomly to 300 CMU undergraduate students of Chiang Mai University, and have targeted the users at the Online Reference Databases Room, the second floor of the new building of the Central Library, Chiang Mai University, the location where most of students came to use online databases provided by Chiang Mai University. Distribution of questionnaires took approximately one month. Before students were asked to answer the questionnaires, the purpose of the survey and instruction of the questionnaires were thoroughly explained. Each respondent took approximately 10 to 15 minutes to complete the questionnaire.

After the data has been collected, only 9 multidisciplinary databases which all subjects are familiar with or feel they are directly related to their fields of study are analyzed. 21 subject-specific databases are excluded because the aim of this research is to explore the overall status and using rate of databases used by the majority of students, which are multidisciplinary databases. The subject-specific databases are not the focus as they need to be separately examined and factors such as number of users, users' qualifications, and users' needs vary. Respondents cannot provide accurate information on the subject-specific databases they rarely associated with.

The questionnaire was divided into four parts;

Part 1) The biographical data of the respondents

The questions in this part were designed to obtain information concerning the respondents' gender, field of study, faculty, year of study and number of years they have used the Internet.

Part 2) The status of online databases usage at Chiang Mai University Library.

The questions in this part were designed to get information about the respondents' experiences on using online databases service, frequency of using online databases service, learning processes, and purposes of using online database service.

Part 3) The respondents' needs from the online databases service

In this part, the questions were designed to get information about the needs of users when using online databases service such as user handout, assistance from library staffs, introductory document for new online databases, proper location for setting up computers, printing services, and the speed for retrieving information. The respondents were asked to check one of the four rating scales that best suit their demands provided with the degrees of *high, fair, low* and *unnecessary*.

Part 4) The problems of using online databases

The questions in this part focused on the problems while using online databases which were divided into four main sections including 1) the network problem and the understanding of searching methods, 2) convenience of searching service, 3) the equipment of online databases service, and 4) the result of searching. The respondents were asked to identify level of problems by checking one of the four rating scales that best suit their opinions from the four rating scales including *serious, moderate, fair*, and *acceptable*.

3. Population

The random samples of this study were 300 CMU undergraduate students, both male and female students who enrolled to study in the Bachelor Degree level at Chiang Mai University during the academic year 2003-2006 (1st – 4th year students).

4. Data Collection

Data was collected from the questionnaires distributed randomly to 300 CMU undergraduate students. The distribution took place at the Online Databases Service Room, the second floor of the new building, the Central Library from July to August, 2004. The returned questionnaires were 295.

5. Data Analysis

From the returned questionnaires, data was then analyzed by using a variety of statistical techniques available in SPSS program including Descriptive Statistics. The

result was shown in statistical tables of frequency, percentage, mean, and standard deviation.

6. Limitation

In this research study, the subject-specific databases cannot be analyzed because the number of the population studied (the undergraduate students) was not equally distributed and thus cannot represent accurate results in response to the study on subject-specific databases. That means some students cannot provide responses to certain databases they are not familiar or not directly related to their fields of study. The research was then designed to focus on multidisciplinary databases since they consist of contents in various disciplines which can be utilized by all population studied. In addition, 9 multidisciplinary databases were found from the service provided by the Central Library, Chiang Mai University, which are *Academic Research Premier, Annual Reviews, Blackwell Synergy, H.W.Wilson, ProQuest Digital Dissertations, ScienceDirect, Taylor & Francis, Thomson Gale Testing & Education Reference Center, and Thai Theses Online.* The analysis will be based on the results obtained from these 9 databases.