CHAPTER ONE

INTRODUCTION

Statement of the Problem

Generally, a considerable percentage of the second language (L2) learners' vocabulary is acquired incidentally (Reider, 2002). For example, learners looked up words in the dictionary during reading for comprehension. Afterwards, some words are remembered even though the main task was not a vocabulary learning task, or it was not the reader's specific intention to learn the words from the text (Laufer & Hill, 2000).

Furthermore, Reider (2002) stated that the condition of incidental vocabulary acquisition depended on two factors: the availability of the resources required for specifying contextual meaning and the necessity for focusing on a particular word. The resources of the text consist of textual clues as well as the learner's second language and world knowledge, whereas the necessity for a meaning specification is determined by textual condition, learner's conditions and situational factors.

Nowadays, the importance of vocabulary in language learning increases. Nuyen (2003) mentioned that vocabulary plays a crucial role in language learning especially learning English as a foreign language. It links the four skills of speaking, listening, reading and writing together. Moreover, most teachers agreed that the single component of any language course is vocabulary. No matter how well the students learn grammar, communication in L2 cannot be meaningful without words (Jyväskylä University, 2002). Hunt (1998) also pointed out the importance of vocabulary learning. Lexical errors are usually more disruptive for communication and comprehension than grammatical ones In order to communicate well in a foreign language, students need to acquire an adequate number of words and know how to use them accurately.

Several reasons are mentioned as to the importance of vocabulary in language learning. Nation (1990) stated that vocabulary was extremely important and that inadequate receptive and productive vocabulary was an obstacle to learning a foreign language. Many language teachers feel that vocabulary should play a central role in any language course (McCarthy, 1990). McCarthy continued that meaningful communication in a foreign language depends mostly on word; expertising the

grammatical rules or pronunciation does not help.

Similarly, Tum (2003) emphasized the importance of vocabulary by stating that "without vocabulary, nothing can be conveyed" (p.3).

However, vocabulary did not play the main role in language teaching and learning in the past. For instance, Kristiansen (1994) pointed that traditionally vocabulary learning was considered the easiest part in foreign language learning. This led to the negligence of vocabulary practice and an emphasis on grammar, which was considered the most important and difficult aspect of foreign language learning. She also stated that there was a growing interest in communication and cultural knowledge in foreign language teaching, but there was still little research on how vocabulary should be practiced. In addition, Nation (2001) insisted that vocabulary was an area that was neglected in foreign teaching for several years. Similarly, Tum (2003) stated that vocabulary teaching was not considered of primary importance in English as a foreign language (EFL) because vocabulary was only a mean rather than a goal in language learning. Therefore, students were taught basic grammatical patterns instead of vocabulary.

At present, technology and education are closely related. Engler (1972) stated that if the ecology of

education was viewed as the web of relationships among learners, teachers, and the environment in which they operated, then it was clear that these relationships were largely defined by the prevailing technology of instruction. Technology is tremendously involved in both teaching and learning language; for example, teaching the English language through films, radio, television, language labs with audio or video tapes, computers, and interactive video (Cunningham, 1998). There are several knowledgeable sources about learning and teaching language through technology. For instance, the Ghostwriter program (Homestead Company, 2000) was created to help students learn how to write a summary. It could be used as a self-access purpose or in a classroom use.

In addition, learning language by using multimedia technology has been a successful phenomenon since 1993 (Eastment, 1998); it has allowed full multimedia materials to be transmitted. Multimedia has a potential to make an enormous impact on language teaching. The ability of multimedia to integrate high-quality video and audio with texts and language exercises provides an environment controllable by the learners (Eastment, 1996). As technology developed, there was more interactive use of computer-assisted language learning

(CALL) as well as the integration of various media for the computer system (Pusack & Otto, 1990).

Because of the importance of computers in education, computer assisted instruction (CAI) spreads gradually to language learning and teaching. Kitao (1994) stated that the computer was an effective tool in language learning and teaching. It could be used in two different ways. First, teachers can use it to present pictures, videos and written texts with or without sound. The presentation can be programmed in advance or handled manually. Second, the computer is provided to students individually. The computer can function a tool to be used in learning, and students can interact with the computer. They can do drills, tutorials, games, and simulation. They can work by themselves or with their classmates. Students can also work on a computer during the class doing assignments, reviewing, or presenting information to their peers.

There are many research studies regarding the use of CAI in vocabulary learning. The majority of the studies reviewed from 1990 to 2000 attempted to show the advantages of using the computer in the classroom by focusing on benefits and potentials of computer technology (Liu, 2001). Liu suggested that research focus should go beyond anxiety, attitudes, and language

production. It needed to be conducted in less explored skill areas. Vocabulary is one of the interesting topics to be explored.

Therefore, the purpose of this study was to determine whether CAI resulted in better vocabulary acquisition and long-term retention than printed text.

This study compared vocabulary acquisition and vocabulary retention of EFL students who used a CAI program and those who used a printed text.

Research Questions

This study was guided by the following research questions:

- 1. Which group of EFL learners, those who use a CAI program or those who read a printed text, gets higher scores in an immediate vocabulary test?
- 2. Which group of EFL learners, those who use a CAI program or those who read a printed text, gets higher scores in a vocabulary retention test?

Hypothesis

In accordance with prior research findings, the following hypotheses were posed:

Hypothesis #1: Participants who participate in the reading of a CAI lesson will acquire more vocabulary words than participants who intentionally attempt to acquire the same words via a printed text.

Hypothesis #2: Participants who acquire vocabulary incidentally through reading by a CAI lesson will exhibit higher retention rates than participants who learn the lesson by a printed text.

According to both hypotheses, Hypothesis #1 predicts that there should be significant difference between the control group and the experimental group in their immediate test scores. Hypothesis #2 predicts that there should be significant difference between the control group and the experimental group in their delayed test score.

Significance of the Study

At present, technology has been adopted to facilitate an educational system. Because of the achievement of CAI in language learning, CAI has been used a tool to help learners improve their vocabulary knowledge. CAI is used to improve reading, writing, listening and speaking skills, which are the principal parts of learning languages. Therefore, several research

studies focus on the use of CAI as a tool in language classrooms. However, there were a few studies in Thailand that investigate the use of CAI as a vocabulary learning tool. The present study revealed the results in this topic.

Besides focusing on CAI as a tool for learners, this study promoted a learner-centered approach. It provided EFL learners an alternative way in studying language. Since traditional teaching and learning rely more on paper-based materials, the current study brought the advantage of technology to CAI lessons by enhancing the vocabulary learning with multimedia.

Moreover, this study reveals the effectiveness of using CAI in language learning for Thai EFL learners.

At present, the use of CAI in EFL increases. However, there have been no studies to prove the capability of the CAI language lesson towards the development of the vocabulary acquisition by comparing a CAI lesson to a printed-text lesson; therefore, this study focused on this particular point.

Lastly, CAI is beneficial to language learning because it includes experiential acquisition and motivation. It enhances students' achievement, authentic materials, greater interaction, individualization, independence from a single source of information and

global understanding (Lee, 1998). Therefore, CAI attracts the attention of teachers, who are interested in this field, to adopt CAI lessons in classroom learning in Thailand instead of using only printed texts. This study provided some fruitful results for both teachers and learners about using CAI by comparing the use of the CAI to the use of the printed text in learning vocabulary.

Definitions of Terms

Computer-assisted instruction (CAI) refers to computer software, which was designed to assist both teachers and students in the learning process. As such, it included several types of systems that were designed for different teaching methodologies (Poole, 1997).

Computer-assisted language learning (CALL) refers to learning and teaching language by using technology such as World Wide Web, the internet, multimedia, CD-ROM, technology coordinator, chat room, email, etc (Egbert & Hanson~Smith, 1999).

Computer-assisted vocabulary learning (CAVL) refers to the use of the computer in a lexical skill.

Incidental vocabulary learning refers to a common means of learning new vocabulary by the product of another activity, such as reading or communication,

without the learner's conscious decision or intention to learn the words (Laufer & Hill, 2000).

Vocabulary acquisition refers to a process, which consists of gradual acquisition of the various properties of a word through repeated exposures. Several stages of vocabulary acquisition are distinguished 1) observation, 2) storage and linkage, 3) consolidation (Groot, 2000).

Vocabulary retention refers to learners' capacity to recall vocabulary meanings. It is an inexhaustible memory and can accommodate any amount of new information (Chapelle & Jamieson, 1986).

L1 refers to the learners' first language; in this study it is the Thai language of the students.

L2 refers to a target language - the foreign language being-learned.

Delimitations of the Study

There are two main important delimitations, which this study contains. First, this study only attempted to test the efficiency of self-learned vocabulary by using a CAI lesson and a printed-text lesson. Other factors such as using the dictionary or gaining vocabulary knowledge from teachers by learning the lesson were ignored. Second, the study tried to explain the vocabulary

acquisition and retention of 10th-grade students who had a one-year experience of computer knowledge, and about 6-10 years of English as a foreign language.

Assumptions

This study is proceeding on the basis of the following assumptions:

- Learners had similar background knowledge of English and computer. They performed a test without anxiety, pressure and fear.
- 2. Underachievement arose not from the participants' incapacity to achieve, but was rather an expression of their choice.

Organization of the Study

This study is presented in five chapters. Chapter
One indicates the statement of the problem of this study.
research questions, significance of the study,
definitions of terms, delimitations, and assumptions of
this study are also included. Chapter Two presents the
theoretical views of vocabulary learning and the review
of related literature. Chapter Three consists of the
research procedure, which is divided into five sections:

participants, materials, instruments, data collection and data analysis. Chapter Four presents the results of the study, which compares the experimental group and the control group, and the discussion of the study. Chapter Five summarizes the study as well as recommendations for the teaching and learning and for the possibility of future research in this area.