# CHAPTER 1

# INTRODUCTION

## 1.1 Rationale for the Study

Inadequate vocabulary knowledge is an obstacle to reading comprehension for students of English as a foreign language (EFL) (Levine and Reves, 1998). This is also the case in English language learning in Thailand (Wimonkasem, 1992). In fact, it is widely admitted that a key problem in learning English for Thai students is inadequate vocabulary knowledge; these students need more lexical knowledge to improve their English language learning. Several Thai teachers of English, as well as, researchers have made efforts to explore strategies and techniques for teaching and learning English vocabulary such as: guessing through derivational morphology (Singhaphan, 1997); using the vocabulary-card-box technique (Tassana-ngam, 1994); using the strategies for learning vocabulary: comprehension, storing and production (Waemusa, 1993); and learning of the individual meanings of target words, and deriving word meaning from context (Wimolkasem, 1992). A context-based approach is widely used to help acquire vocabulary knowledge in ESL and EFL settings. Ying (2001) found that Chinese students not only learn English vocabulary but also know how to use the words in context. They are also better in comprehension when they are trained to infer meaning from context. However, inferring word meaning from contextual clues does not foster retention of the word or its meaning in their memory. A study by Mondria and Wit de Boer (1991) indicates that although learners correctly infer a meaning of a word from its context, this does not lead to better retention when compared with those making incorrect inferences.

Although guessing word meaning from contextual clues has a role in reading comprehension, many researchers question the effectiveness of contextual guessing in developing vocabulary knowledge. According to Davis and Lyman-Hager (1997), and Hulstijn et al. (1996), learners are able to successfully learn vocabulary items from reading texts by means of guessing word meanings from contextual clues; but without specific attention to a word, they do not retain both the word and its meaning.

Therefore, many researchers have taken an interest in alternative techniques to help enhance vocabulary knowledge by providing dictionary definitions, glosses, and multimedia annotations for vocabulary knowledge development while reading (De Ridder, 2002; Nikolova, 2002; Al-Seghayer, 2001; Laufer & Hill, 2000; Koren, 19999; Chun & Plass, 1996; Hulstijn, Hollander, & Greidanus, 1996; Nist & Olejnik, 1995; Davis & Lyman-Hager, 1997; Knight, 1994; Hulstijn, 1993; Luppescu & Day, 1993).

Many studies have been conducted to test the effectiveness of the use of online dictionaries, glosses, and multimedia annotations on vocabulary acquisition through reading task (e.g. De Ridder, 2002; Nikolova, 2002; Al-Seghayer, 2001; Liou, 2000; Koren, 1999; Chun & Plass, 1996). Groot (2000) states that there is a relationship between retention of a word and its meaning and lexical information of the word provided such as its pronunciation and its semantic and syntactic features. Most studies investigate the effectiveness of providing one single piece of lexical information of a new word, such as L1 translation, L2 definition and pictorial glosses. Only a study by Laufer & Hill (2000) provides a variety of lexical information.

In the area of vocabulary knowledge development through use of dictionary use, glosses, and multimedia annotations, research focusing on word acquisition and retention adopts a cognitive psychological framework to explore greater retention. Regarding the role of consciousness in second language learning, Schmidt (1990) concludes in his study that to convert input to intake, input needs to be noticed. Learners should be encouraged to notice some unknown vocabulary items that obstruct their reading comprehension.

In addition, Craik and Lockhart (1972) propose a *'Levels of Processing Theory'* stating that when information is processed, it is usually processed at different levels: shallow and deep. Shallow processing refers to processing information only in terms of its surface structure e.g. sound, letters, and shape. Deep processing refers to fully analyzing information in terms of its semantic appropriateness in a sentence or the meaning category to which it belongs. The process of deep semantic analysis will lead to better memory. It is crucial that learners are promoted to deeply process the unknown word so that they not only got the word's meaning but also retain the word and its meaning in long-term memory.

A more recent endeavor in the area of vocabulary acquisition is computer-assisted language learning (CALL). There are computer-based studies that investigate the CALL environments that promote vocabulary acquisition (Al-Seghayer, 2001; De Ridder, 2000; Liou, 2000; Laufer & Hill, 2000; Chun & Plass, 1996). The computer is used not only to provide input of vocabulary knowledge but also to track learners' behavior in their learning process. Log files can track data about words and how frequently they are looked up. Computer log tracking provides more accurate and reliable results in the relationship between learners' look up behavior and retention of receptive vocabulary knowledge than the think aloud protocol. In the think aloud protocol, learners are requested to speak out what is on their mind when they are doing a certain language activity in non-CALL studies

It should be pointed out that there has been little research exploring different options for learning lexical information and which options work best. This study uses a variety of lexical information to increase word acquisition and retention while reading in the CALL context.

In Thailand, the investigation of learners' look up behavior and words retention in CALL context is novel. There is no CALL study that investigates the impact of the multiplicity of lexical items that learners use while reading, and the relationship between their look up behavior and long-term retention of vocabulary knowledge. Therefore, the present study attempts to address such concerns by examining Thai EFL students' look up behavior and their vocabulary acquisition and retention.

## 1.2 Purposes of the Study

The study investigated the effects of look up behavior on vocabulary acquisition and retention via a computer-assisted language learning reading package by intermediate level EFL students. The CALL reading package provided five look up options of unfamiliar words: (1) meaning in Thai, (2) meaning in English, (3) contextual example of word use, (4) synonym/antonym, and (5) word pronunciation. This study attempts to provide answers to the following questions:

1. To what extent do intermediate EFL students acquire and retain vocabulary knowledge after using the CALL reading package?

2. What is the relationship between students' look up behavior and their levels of vocabulary acquisition and retention?

3. What are the students' attitudes towards the provision of lexical information in the CALL reading package?

## 1.3 Definitions of Terms

1. **Computer log tracking** is a device to record the learning process while learners are using the computer software for language learning (Liou, 2000).

2. **Look up behavior** refers to learners' actions when they look up the meaning of unknown words by freely choosing any of the different types of look up options available.

3. **Look up options** refers to choices of lexical information that clarify the meaning of unknown word in the text (Laufer & Hill, 2000).

4. **Unknown/unfamiliar words** refer to English vocabulary that most Prince of Songkla University first year students do not know the meanings of.

5. **Immediate vocabulary test** refers to a vocabulary test that is administered immediately after the reading treatment to assess students' levels of vocabulary acquisition.

6. **Delayed vocabulary test** refers to a vocabulary test that is administered two weeks after the reading treatment to assess students' levels of vocabulary retention.

## 1.4 Scope and Limitations of the Study

1. The study focuses on differences in look up behavior and word acquisition and retention of students.

2. The study is designed to investigate students' vocabulary development while reading, so the text comprehension is not considered.

3.  The subjects of the study are not a large group of subjects, so the results of the study should be taken as tentative rather than conclusive.

4.  The study is limited to first year students at Prince of Songkla University, Hat Yai campus where the problems and situations may differ from those in other universities.

## 1.5 Expected Results

1.  Students might acquire and retain vocabulary as a result of accessing the look up options.

2.  Looking up various types of lexical information might be associated with better retention.

3.  Looking up various types of lexical information might positively affect long-term retention.

4.  Students would have a positive attitude towards the provision of lexical information in the CALL reading package.