Chapter II

REVIEW OF LITERATURE

The review of related literature will be discussed under two headings:

(1) theoretical background (2) related research.

2.1 Theoretical Background

2.1.1 Definitions of Reading

Reading is one of the most important study skills if we compare it with others. There are many reasons why students should learn to read English texts such as, preparing for professional fields, for higher studies, for self – confidence and for enjoyment. We can be sure that reading English is useful for students and they learn it for their careers, for study purposes, or for pleasure. Before studying the research in-depth, many definitions of reading should be gathered from various perspectives.

According to Freeman and Yvonne (2002), reading is a receptive skill in a written mode. It can help develop reading independently from listening and speaking skills. Reading skills are specific abilities that allow a reader to read written texts as meaningful language, to read anything written with independence, comprehension and fluency and to mentally interact with the message.

Moreover, Naranunn (1998, p.52) gives the other idea that reading progresses from a perception of an accumulation of isolated skills and strategies.

Readers are assumed to become more active during reading. Therefore, they do not only decode word by word but also give meaning to the text based on their prior knowledge.

Similarly, Weir (1993, p.64) says that reading is seen as a selective process taking place between the reader and the text, in which readers' background knowledge and various types of language knowledge interact with information in the text to achieve reading comprehension. It involves text types, purposes, performance condition, activities in an academic context, operations and depends on the students' proficiency.

Sosothikul (1992, p.86) clarifies that reading is basically concerned with identification and learning of information. In other words, it is mostly concerned with understanding and remembering information. Reading is also related to thinking in such a way as to make the information meaningful to the reader.

Silberstein (1994, p.7) states "Reading is an active process. Although reading is sometimes described as "passive" or "receptive", she has the notion that reading is an active process related to problem solving. In addition, Silberstein (1994) states in her view of the research and hypotheses about the complexity of the reading process and some implication for the classroom: the reader's background must interact with his or her innate conceptual abilities. The three basic factors learners must have and develop are background knowledge in the first language, innate conceptual and cognitive abilities and processing strategies.

"Reading is a psycholinguistic guessing game" (Goodman, 1970, cited in Brown, 1994, p.284). He also states reading captures the spirit of the bottom-up part of the process of decoding meaning from the printed page. "Readers must first recognize a multiplicity of linguistic signals (letter, morphemes, syllables, words, phrases, grammatical clues, discourse markers) and use their linguistic data processing mechanism to impose some sort of order on these signals. This data-driven processing obviously requires a sophisticated knowledge of the language itself. Virtually all reading involves "a risk-guessing game".

From all of these definitions, it can be concluded that reading is viewed as an interactive process in which readers need to combine their prior knowledge and experience with new information.

2.1.2 Perspectives on the Reading Process

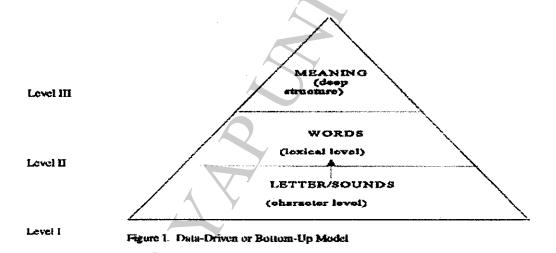
"Reading is a complex process where many processes work simultaneously and automatically" (Silberstein, 1994, p.12). Researchers have presented several models in an attempt to explain the reading process. In second language reading and foreign language reading, according to Barnett (1989,p.17), Aebersold & Field (1997, p.16-17), and Nuttall (1996, p.18) the reading process can be classified into three models. The models are bottom-up, top-down, and interactive. Each model emphasizes text-based variables such as vocabulary, syntax and content such as background knowledge and the purpose of reading.

(A) The Bottom-up model

Readers begin with the text and construct meaning from letters, words, phrases and sentences and analyze the text. This is a text-driven model of comprehension. In this view of reading, Zakaluk (1996) presents learners as passive decoders of visual stimuli, while others present them as active participants who construct their own encoding. Other terms of the bottom-up model includes code-emphasis, a phonic- base and test-driven. Gough (1972, cited in Chaudhry, 2002) proposes that this model shows processing in reading from letters to sounds, to words and to meaning.

The process is shown in the following figure:

Figure 1 : Data- Driven or Bottom Up Model (Zakaluk, 1996)



Based on this perspective, there are three steps in the reading process. Readers analyze the text in small units in the first step, then symbols from the text are converted into words, words into sentences and sentences into overall meaning. Thus small low-level units are built hierarchically into large, higher-level units until meaning can be separated.

Nuttall (1996, p.16) says that in bottom-up processing, readers build up meaning from black marks on the page and then they recognize letters and words, then workout sentence structure. In this case, they must examine the vocabulary and syntax to make sure that they have grasped the plain sense correctly. Thus, bottom-up processing can be used as guidance to "tunnel vision" which means seeing things from our own point of view.

(B) The Top-down model

Nuttall (1996, p.17) says that in top-down processing, readers draw on their own intelligence and experience, based on the schema they have acquired. This kind of processing is used when they interpret assumptions and draw inferences. This process can help the readers to make a reasoned guess at the next step.

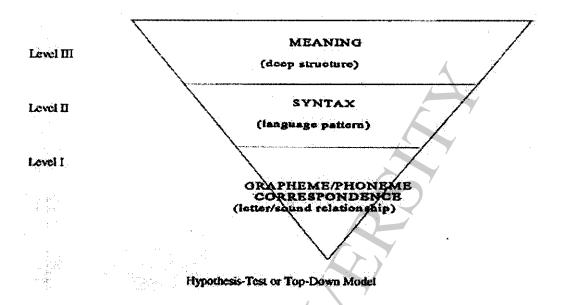
Goodman (1970, cited in Zakaluk, 1996) says efficient reading does not result from the precise perception and identification of all the elements in a word. Readers have a prior sense of what could be meaningful in the text, based upon their previous experience and their knowledge of language.

Zakaluk's view is "what readers bring to the text separately in terms of both their prior knowledge of the topic and their knowledge about language, assists them in predicting what the upcoming words will be" (Zakaluk, 1996).

Based on this model, it is evident that the flow of information proceeds from the top downward so that the process of word identification is dependent upon meaning firstly. Thus, the higher level processes embodied in past experience (semantics) and the reader's knowledge of the language pattern interact with and direct the flow of information.

A representation of the 'top-down' process is depicted in the following figure:

Figure 2: Top-Down Model (Zakaluk, 1996)



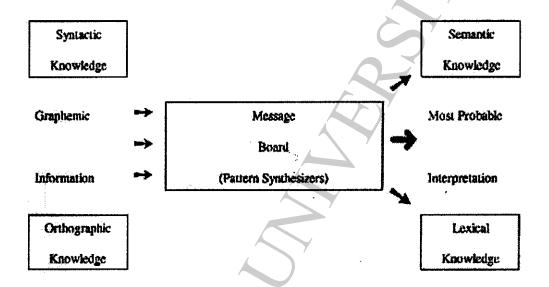
Besides this description of the reading process, Wirotanunn (2002), describes that in a top-down model, the process moves from the top (the higher level mental stage) down to the bottom (the text). The reading process is driven by the readers' minds at work on the text. Readers use their general knowledge, taken from this perspective, readers make intelligent guesses about the text and sample only enough of the text to confirm or reject the guesses.

In addition, readers bring a great deal of knowledge, expectations, assumptions and questions to the text and this also provides them with basic understanding of the vocabulary, they continue to read as long as the text confirms their expectations (Aebersold & Field, 1997, p.18).

(C) The Interactive Model

Rumelhart (1977) proposes an interactive model in which both letter features and data driven sensory information and nonsensory information come together at one place (cited in Zakaluk, 1996). He presents the "message board" in the accompanying picture to describe the process as the picture below:

Figure 3: Message Board



The figure is the message board, or pattern synthesizer. Orthographic, lexical knowledge (knowledge of both how words form and what words mean), syntactic and semantic knowledge come together simultaneously to facilitate word identification. The goal is to help readers gain insight into factors which influence and constrain reading acquisition.

Silberstein (1994, p.18) also states that fluent readers seem to simultaneously employ what have come to be known as lower level skills that allow them to readily and automatically recognize words. On the other hand, higher level skills

allow them to comprehend and interpret. The main point of an interactive reading approach is the interaction between the text and the reader.

Based on all views of the reading process, bottom-up, top-down, and interactive processes are very important for reading. Whenever readers can analyze the reading process they can understand the text and develop their comprehension at the same time.

2.1.3 The Roles of Reading Teachers

Teachers can play many roles in the course of teaching since they are one of the important factors in reading development processes. Teachers should understand their roles and their responsibilities in order to help students to be successful in developing their reading ability.

Grabe (1991,cited in Brown, 1994, p.375-406), defines the teachers as readers and teachers. He categorizes teachers as follows:

1. Teachers as Readers

Teachers should be well read and know the sources of different types of material. They should have a clear interpretation of the texts they read. Moreover, they should be aware of the problems that readers would face and the procedures involved in reading for various purposes.

2. Teachers as Teachers

Teachers should be well prepared in basic professional understandings. The most important thing is they should have a clear understanding of the nature and development of students and the ways in which students learn. They should conceive of themselves as practitioners in the art of helping students acquire

independence and resourcefulness in all their learning experience, including those that promote growth in and through reading. Furthermore, as the teachers of content areas, they should not only be a master of its basic ideas and resources but also be capable of promoting competence among their students in the use of reading as an aid in learning.

2.1.4 The Role of the Readers

Nuttall (1996, p.38) defines a reciprocal role for the students. The following items are described as students' roles.

1. Taking an Active Part in Learning

Reading is learnt rather than taught, and the thing students can do is learning.

Thus, their students' first responsibility is to be active and take charge of what they do.

2. Monitoring Comprehension

Students need to understand how texts work. When students read, they must be able to monitor their own comprehension. This ability to think about what is going on in one's own mind is termed metacognition and is identified as a key factor in one's capacity to develop as readers.

3. Learning Text Talk

Good readers should carry on a dialogue with the text. Students have to learn how to do this. An effective way to promote the skill is to talk about texts in class. And it is the students who have to make the most of the opportunities by joining in.

4. Taking Risks

Students have got to take the risk of making mistakes. They also need to be prepared to admit when they do not understand.

5. Learning not to Cheat Oneself

Learning to read is learning to give oneself an enormous advantage in life.

It may lead to better jobs. Students who do not want to learn to read can easily cheat on many of the activities. But they are cheating only themselves; nobody else will suffer. They are wasting their opportunities.

An other view belongs to Rubin and Thompson (1982, cited in Brown, 1994, p.191). They define good language learners as:

- 1. finding their own way, taking charge of their learning
- 2. creative, developing a feel for the language by experimenting with its grammar and words
- 3. making their own opportunities for practice in using language inside and outside classroom.
- 4. making errors work for them and not against them
- 5. using linguistic knowledge
- 6. using contextual cues to help them in comprehension
- 7. learning to make intelligent guesses

2.1.5 Reading and Schema Theory

Since experiences are acquired within the context of culture, the knowledge structures that readers bring to a written text might be expected to differ from those of people from different cultural background (Carrell & Eisterhold,1983, p.85). Second language and foreign language readers' failure to activate an appropriate schema theory during reading, may result in various degrees of non-comprehension. They may not process an appropriate schema anticipated by the author due to their lack of familiarity with the culture.

Perry (2002) defines schema as a hypothetical mental structure for representing concepts stored in memory. He also states that schema is created through one's experience with people, objects and events in the world. When one has an encounter with something repeatedly such as going to restaurant, one begins to generalize restaurant experiences to develop an abstract mental structure for this experience.

Schema theory is based on the belief that "every act of comprehension involves one's knowledge of the world as well" (Anderson & Pearson et al., 1977 cited in Carrell & Eisterhold, 1983, p.76). Thus, readers develop a coherent interpretation of text through the interactive processes such as schema that a reader brings to a text.

"Reader expectations are based on reader's prior knowledge. Background knowledge that aids in text comprehension is called schema theory" (Silberstein, 1994, p.7). Silberstein also mentions that there are two kinds of background knowledge: formal schemata and content schemata. First, Formal schemata are involved with knowledge of rhetorical structures and conventions, whereas content schemata are involved with the knowledge of the world beyond texts.

Carrell & Eisterhold (1983, p.76) express that schema is a process of interpretation. It is guided by the principle that the input is mapped against some existing schema and that all aspects of that schema must be compatible with the input information. This principle results in two basic modes of information processing: bottom-up and top-down.

In addition, Brown (1994, p.284) defines that schema theory is the way that readers infer a writer's message. The readers bring information knowledge, emotion, experience and culture to the printed word.

Extract from the LingualLinks Library (1999) describes some characteristics of schema as followed:

- 1. Schemata are always organized meaningfully, and as an individual gains experience, develop to include more variables and to be more specifically.
- 2. Schemata change moment by moment as information is received.
- 3. Schemata may also be recognized when incoming data reveals a need to reconstruct the concept.
- 4. The mental representations used during perception and comprehension. Then they evolve as a result of the process and combine to form a whole, which is greater than the sum of its parts.

"Reading problems are not just caused by schema deficiencies and the relevant schemata must be activated" (Carrell & Eisterhold, 1983, p.75). In other words, readers may come to a text with prior knowledge but their schemata are not necessarily activated while reading.

In conclusion, the schema is the process through which readers interpret new information by using this knowledge previously stored in long-term memory. Schema theory explains how previous experience results in organized knowledge structures that influence comprehension, learning, and recall of discourse. The new information, in turn, modifies the existing knowledge structures (Chaudhry, 2002).

2.1.6. Material Selection

One of the more complex tasks that English as a foreign language (EFL) teachers encounter is the selection of appropriate reading materials. Teachers must choose appropriate readings for their students, whether by selecting texts from authentic sources or adapting the available reading textbook.

In addition, Barnett (1989, p.144) states that text selection criteria are based on text length, sentence length, or vocabulary/new words density. The importance is reader interest, text types, text structure, authenticity and the match between reader and text schema.

According to Silberstein (1994, p.102), Barnett (1989, p.145) and Nuttall (1996, p.177) reading texts are categorized as: authentic and simplified or modified texts. "Material in the reading class refers not only to the types of texts found in magazines and books, but also to any item from everyday life that conveys meaning through written language such as advertisements, labels and so on" (Aebersold & Field, 1997, p.45).

Barnett (1989, p.145); and Aebersold & Field (1997, p.79) point out that authentic texts are taken directly from first language (L1) sources and are not changed before they are used in the classroom. The examples of authentic materials are articles or advertisements from an second language/foreign language newspaper and train schedules. Authentic materials are vital; they motivate students, offer a real context, transmit the target language culture and prepare students to read outside the classroom. Moreover, Silberstein (1994, p.102) clarifies that reading passages should be authentic in the sense that they relate to the real world texts students will encounter outside the classroom.

In contrast, "simplified texts mean texts that are adapted and no longer resemble the original in terms of either syntax, discourse structure, vocabulary, or content" (Silberstein, 1994, p.102). Besides Aebersold & Field (1997, p.48) also assert that the term modified or simplified is generally used to describe traditional text materials in which the language of the text and sometimes the cultural references have been engaged.

In brief, just a few items in a text can be modified, or the complex text can be rewritten. Generally, the organization of the information in the text and the general message are kept, but the language (grammar and vocabulary) is changed.

Day & Bamford (2000, p.13) state, about the criteria for making a reading selection, that reading materials must be both easy and interesting. "Easy" means materials with vocabulary and grammar within the students' linguistic competence. Furthermore, they argue that the first task for teachers is to find materials that their students will find easy and interesting to read. When selecting reading materials for any age group and ability level, teachers must have the students' interest uppermost in mind.

In addition, Day (1994) mentions the seven factors in an order that reflects the reading selection. These are interest, explicability, readability, topic, political appropriateness, cultural suitability and appearance.

To sum up, most EFL teachers must make sure that their students do well in their courses and pass the required examination. Teachers should make sure that students have access to easy, interesting reading materials. The more they read and the more they enjoy it, the more likely it is that they will become students who both can and do read in English (Day & Bamford, 2000, p.17).

2.1.7. Reading Comprehension

"Reading and reading comprehension are used interchangeably"

(Aebersold & Field, 1997, p.12). Reading comprehension is accomplished when readers understand what a particular text is about. The following definitions of reading comprehension are gathered from various perspectives.

With regard to reading comprehension, Carr (1983, in Thearmtanachock, 1999, p.9) states that reading comprehension is the ability which readers use to interpret the text by linking their previous knowledge to help them to interact and evaluate text meanings. His idea is compatible with Widdowson (1986, p.88-89), who adds that reading comprehension is an interaction between readers and writers. Readers use their background knowledge to interpret the meaning of texts in which writers want to communicate.

According to Durkin (1979), comprehension is the essence of reading. It is active and international thinking in which the meaning is constructed through interactions between the text and the reader.

Furthermore, reading comprehension involves all elements of the reading process. As comprehension is an active process and readers must interact and be engaged with the text for it to work well (National Institute of Literacy, 1997).

Besides the definitions of reading comprehension, Sosothikul (1992, p.29-30) mentions the nature of comprehension. Comprehension requires many intellectual abilities, but the most important ones are:

- 1. the ability to retain information and recall it when required. Readers should be able to remember a reasonable number of ideas expressed in a passage.
- 2. the ability to select important points. Readers should be able to differentiate facts from ideas.

- 3. the ability to interpret information and ideas. In addition to being able to select the importance and the relevance, readers should be able to understand the meaning of facts and ideas.
- 4. the ability to relate knowledge to experience. Readers should be able to relate the text to their previous experience. Then the comprehension will improve.

Furthermore, Donald (1991) suggests ways to improve reading comprehension as following items:

1. Developing a Broad Background

Readers should broaden their background knowledge by reading newspapers, magazines and books.

2. Know the Structure of Paragraph

Readers should know the element of structure because when they can differentiate all the sentences, they will be able to comprehend them.

3. Create Motivation and Interest

Readers should preview materials, ask questions, and discuss with their peers.

When readers are interested in what they read, they will acquire greater comprehension.

4. Highlight, Summarize and Review

Readers should read materials more than one time to develop a deeper understanding. They should highlight, summarize and review important ideas.

5. Build a Good Vocabulary

The best way to improve vocabulary is to use a dictionary regularly.

6. Monitor Effectiveness

Good readers monitor their attention, concentration and effectiveness.

Reading comprehension is very important. When readers lack comprehension, they will not able to comprehend the whole text. Teachers should provide time for lots of in-class reading and outside of class reading. They should also encourage readers to read more, read widely and develop a passion for reading. This is a duty of teachers to help their students improve their abilities.

2.1.8. Reading Comprehension Testing

Tests of reading come in various forms and evaluate a broad spectrum of reading activities. These range from pre-reading concerns or word-attacking skills to reading comprehension, reading speed and skimming techniques. Reading comprehension is the heart of reading evaluation in most schools and universities (Madsen, 1983, p.76).

Nuttall (1996, p.214-217) says that teachers should focus on the reason for testing when they want to test students. She also mentions four main reasons why a teacher might give a reading test: placement into class or program; diagnosis of a student's reading needs or weaknesses; assessment of a student's progress over a given period of time; assessment of a student's achievement at the end of a course.

According to Phinit-Akson (1976, p.70) the teachers give tests to students if they want to test structure, vocabulary and ability to understand tone, inference, metaphor. Harris (1969, p.96) states that the teachers also test student's ability to interpret language and graphic symbols, to interpret the writer's purpose and main idea and to interpret the author's tone and style.

Moreover, Nuttall (1996, p.218-219) discusses what to test in reading as follows:

- 1. Test content, teaching content
 Test content is affected by test purpose and a test is strongly affected by
 what one is teaching.
- 2. Testing Skills

 It is normal practice to define the skills when one wishes to test and then to attempt to write questions which involve such skills.

2.1.8.1. How to test

Before the teacher selects the texts and decides what skills he or she wishes to test, the teacher needs to decide what method he or she will use to test comprehension of the texts and the application of skills.

Lavenson and Kendrick (1967, p.189) suggest the following test method:

- 1. Prepare the students for the test
- 2. Vary the difficulty of the test items
- Test all of the material that has been specified even though the test may be short and include only a few items
- 4. Test vocabulary in context only
- 5. Make directions understandable
- 6. Test only what has been taught
- 7. Test only the target language
- 8. Be sure that correct form and structure are used in test
- Keep written test copies free typographical errors, poor corrections of master copy, bad duplication, and illegible writing
- 10. Give tests frequently

2.1.8.2. Traditional methods of testing reading

Many types of reading test are discussed by (Aebersold & Field, 1997, p.173; Nuttall ,1996, p.223) as following items:

1. Multiple-choice questions

The most common and familiar standardized test is multiple choice. ESL reading textbooks frequently have multiple-choice questions following a reading passage. The multiple-choice questions, however can cause problems for students (Aebersold & Field, 1997, p.173).

"The choices in a multiple-choice questions consist of a correct answer and a variety of responses called distractions. These distractions need to be carefully formulated (Aebersold & Field, 1997, p.173)".

2. Cloze tests

The other popular test is the cloze test. The students are asked to complete words that have been deleted from a text. Since the words are deleted in a fixed order, the test constructor has minimal control over what is tested.

3. Completion Tests

The fill-in-the-blank is another kind of comprehension tests. A simple way to give the test is to use the words from the original passage in order to interpret or analyze the text before completing the sentence. The completion is useful since it demands the students' comprehension of the full text.

4. Short answers and open-ended questions

The students are given a passage to read, then asked to write a few sentences about the reading. They may be asked to write a summary of this passage.

2.1.8.3. Writing tests for the classroom

Teachers need to write their own assessment instruments. Four general guidelines are helpful for that process. Aebersold & Field (1997, p.179) suggest the way to write test as follows:

- 1. Keep the course objectives clearly in mind at every step
- 2. Carefully match the test to what is to be tested
- 3. Recognize the potential for bias and variation
- 4. Design the test to assess what the students know

In conclusion, the first concern in a reading test is the purpose of the test. The teacher should know what they want to test and what the best method is to test it. The content of the test should reflect what students have been taught. The teachers cannot test beyond students' knowledge since it can unfairly affect the result of the test.

Reading is seen as a skill that is difficult to learn. Reading problems may have many causal factors, lying in the learners themselves, the teachers, materials, methodologies and the tests. Based on the literature review, it is logical to draw the conclusion that reading comprehension is the most important aspect of reading. The reading sub-skills also reflect and impact on reading comprehension. The teacher themselves should know how to manage the reading classroom. They should be aware of their roles, the methods in teaching and the materials they use, including tests. Conducting this research will be beneficial for both teachers and students. When they know what the problems are then they can solve and prevent them.

2.2. Related Research

Kamwachirapitak (1989) investigated the effects of reading strategies based on cognitive psychology. The subjects were 45 undergraduate students at Ramkhamhaeng University. There were divided into three experimental groups. The first group was trained to use a rehearsal strategy; the second group was trained to use a rehearsal strategy and elaborational strategy; and the third group was trained to use a multiple strategy. The four reading comprehension skills were recognition, main ideas, inference and problem solving. The findings revealed that all of the reading strategies improved the students reading abilities.

In Japan, Ono (1992) studied twenty Japanese ESL readers' reading strategies. They read short stories with different cultural proximity to students' backgrounds. The findings showed that intermediate and advanced students tended to use less comprehension-based and more interpretation-based reading strategies than beginning level students. The results also showed that the readers interpret a text on the basis of their personal experience, knowledge perception and beliefs.

Wirotanun (2002) studied reading strategies of Thai EFL readers reading Thai and English texts. The subjects were 40 graduate Thai students at Pittsburgh University. It was concluded that because they were asked to read in their native language, little variability use was seen. However, when reading in English, differences in the number and types of strategies used between the groups was significant. Differences also appeared in the variety of strategies used while reading. The findings revealed that the high proficiency EFL readers transferred their reading strategies from L1 to L2 only when the texts shared similar linguistic features. Factors influencing the differences in use were the results of self-

evaluation, outcome expectancy, achievement responsibility, cognitive monitoring, knowledge base, self-esteem and environment.

In Thailand, Youngjermjantra (1994) studied the ability of Mattayomsuksa 4 students to infer from English reading text. The samples were 312 students taking "Reading I" courses in schools under the Department of General Education in Pattani province. The 30-item-test was constructed, developed and administered to measure the students ability to infer that six sub-skills of reading: main ideas, supporting details, sequences, cause-effect relationships, character traits and predicting outcomes. The results from the quantitative result revealed that not only did the students overall reading ability fall below the 80 percent criterion, but also their ability in each of the sub-skills were below the 80 percent criterion.

In 1999, Quian conducted the research on "Assessing the roles of depth and breadth of vocabulary knowledge in reading comprehension". This research took place in Canada. The purpose of this study was to examine relationship among vocabulary size, depth of vocabulary knowledge and reading comprehension in English as a second language. Participants were 74 students attending intensive academic ESL programs at two universities in Ontario and had a minimum second language vocabulary size of 3,000 word families. Results revealed that there was an interrelation between breadth and depth of vocabulary knowledge of the participants and that their depth of vocabulary knowledge was an important factor in the relationships between vocabulary knowledge and academic reading comprehension. In conclusion, the vocabulary knowledge also affects the reading comprehension.