

**EXTENSIVE READING:  
AN EMPIRICAL STUDY OF ITS EFFECTS  
ON EFL THAI STUDENTS'  
READING COMPREHENSION,  
READING FLUENCY AND ATTITUDES**

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## ABBREVIATIONS

The following abbreviations are used in the thesis.

C1a: Control group 1 (with pre- & post-test comparison)

C1b: Control group 2 (with pre- & post-test comparison)

C2a: Control group 3 (with post-test comparison)

C2b: Control group 4 (with post-test comparison)

EFL: English as a foreign language

ESL: English as a second language

ER: Extensive reading

E1: Experimental group 1

E2: Experimental group 2

FL: foreign language

L1: first language

L2: second language

RMUTT: Rajamangala University of Technology Thanyaburi

TL: target language

wpm: word per minute

## ABSTRACT

This study investigated reading comprehension, reading fluency and attitudes of students after exposure to extensive reading (ER), an approach to teaching and learning foreign languages without using a dictionary or focusing on grammar, but aiming to get learners to read extensively by choosing books on their own, for general comprehension, good reading habits and enjoyment (Day and Bamford 1998; Prowse 1999). It was conducted in the Thai context with English as foreign language (EFL) students at Rajamangala University of Technology Thanyaburi (RMUTT) in Thailand during a period of four months, one academic semester. The teaching procedure conformed to the principles of ER with a wide-ranging selection of graded reader books.

Multiple measurements used to assess comprehension with three narrative texts were written recall protocol, and translation tests; multiple choice questions with twelve texts in timed reading to assess reading fluency; and a survey questionnaire as well as an in-depth interview to gather data on attitudes towards extensive reading. The study employed a double-control pre- and post-test (Solomon) design: two experimental groups (N = 52 and 50) and four control groups (N = 46, 48, 42, and 46) of which two are excluded from the pretest to separate out the effects caused by using the same instruments.

The findings suggest positive effects of ER on the learners' reading comprehension and provide conclusive evidence of reading fluency improvement together with a positive attitude towards ER. The study also revealed that credit or score is a key factor to encourage students to read and they preferred reading in a controlled situation in class including taking the tests of timed reading. The thesis discusses the possibility of using testing as a pedagogical tool for the

improvement of reading skills. Implications drawn from the findings suggest that in order to maximize the benefits of ER, an adjustment of procedures is essential prior to the integration with language courses in the Thai and other similar contexts.



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# **CHAPTER 1**

## **INTRODUCTION AND OVERVIEW**

### **1.1 Introduction**

This chapter provides an overview of the research by firstly presenting its rationale, motivation and aims of the study. Then, the scope and limitation of the study are pointed out. Next, the contributions of the study and the organization of the thesis are outlined. On the whole, the chapter aims at giving the readers a holistic picture before elaborating on the research theme in the subsequent chapters.

## 1.2 Rationale of the Study

In Thailand, English, which is viewed as the most dominant foreign language, is an important subject taught in all educational levels. It is also the compulsory subject and the most popular elective subject among several foreign languages since it is regarded as the language for international communication. It is also one of the world's most important languages (Graddol 2004). English is an important tool for communication and as a key for advanced technology (Siramard 1992: 3). Most Thai students, thus, take English as their foreign language subject. One reason of this is that English is required for entry into the tertiary level of education (Ministry of Education 1978 – 2009).

In Thai schools and universities, students acquire much of their knowledge by reading written materials. In other words, reading is the most important among the four language skills – listening, speaking, reading and writing – since students have more opportunity to read in English than to use that language in spoken communication (Rattanaovich 1987: 1).

In view of this, the curriculum plan and syllabi of secondary and higher education focus mainly on reading (Ministry of Education 1978 – 2009). Thus, learning to read well is of prime importance to Thai students in order to both acquire knowledge and promote professional or vocational interest (Tamrackitkun 1995: 2). A reading ability is often all that is *needed* by learners of EFL (Alderson 1984: 1). In addition, although the communicative approach with an eclectic orientation is favoured at various levels of education (Wongsothorn et al 1996: 89), most Thai teachers who teach English focus their teaching on reading, grammar and writing more than speaking (Department of Curriculum and Instruction Development 1998). In spite of these emphases, various research

studies in the field of teaching reading in Thailand indicate that the English reading ability of Thai students at lower secondary school, at upper secondary schools, and even at university level is unsatisfactory; that is, students cannot achieve the main objectives required in the syllabus (Boonpatanaporn 1985: 147, Curriculum and Development Centre 1985: 142). This is in line with the most recent results of the Ordinary National Educational Test (O-Net) or the O-Net exams held in February 2010 revealing that the average scores of the English tests in the three educational levels: primary, lower secondary and upper secondary (high school) levels were below 50 per cent as reported by the National Institute of Educational Testing Service (NIETS) of Thailand. The O-Net exams included 898,000 primary school students, 794,000 lower secondary school students and 350,000 high school students (The Nation 2010).

One of the main problems in teaching reading in Thailand seems to be inappropriate methodology. Many teachers lack skills in methodology (Department of Curriculum and Instruction Development 1998, Department of Humanities, Srinaharinwirot University, Pratumwan Campus 1985: 339, Noisangsri 1983: 10).

Given this problem, it is of interest to study the effects of extensive reading (ER, hereafter), employed in teaching English reading to Thai university students since reading is considered the most important skill to master for many advanced students of English as a foreign language (EFL) (Eskey 1973: 169). From this study, the findings may reveal whether the students' reading comprehension and fluency in improved after exposed to ER and whether the students have a positive attitude toward ER. The study is aimed to be conducted at Rajamangala University of Technology Thanyaburi (RMUTT, hereafter) where the researcher has been working now that most English classes at RMUTT do not

provide adequate opportunity for students to develop their reading skills. Students do not actually read much, either in class or out of class. Moreover, the condition of reading is usually controlled by teachers, not students, that is teachers will tell students what, when and how to read. This is the typical English teaching performance at RMUTT in general and also the typical teaching of English reading in particular, which is taught by translation procedure and focused on intensive reading. Consequently, it has not been successful. Students have gained knowledge of the language and reading skills acquired in intensive reading but it is not sufficient to improve students' overall reading ability. Most students have low existing English language competence and cannot read well. One of the evidences is the low scores on the English tests obtained from both the RMUTT admission and the Central University Admission System (CUAS). Another is the information obtained the personal conversations and discussions with a number of English teachers at RMUTT and those from other universities in Thailand during seminars and conferences. Therefore, one of the most effective ways to help students improve their English is to provide extensive comprehensible language through reading. As Nuttall (1982: 168) has pointed out, the best way to improve one's knowledge of a foreign language is to go and live among its speakers. The next best way is to read extensively in it for the reason that, as Krashen (2004: 16) has contended, it is a major source of reading competence, vocabulary, and the ability to handle complex grammatical constructions.

In this regard, one procedure to solve the problem mentioned above is extensive reading (ER, hereafter). If students can read extensively, they can develop their language knowledge (Nation 1997; 31) since ER builds vocabulary

and improve reading comprehension, spelling, grammar usage and writing (Cho and Krashen 1994, Krashen 1993, Pilgreen and Krashen 1994).

### **1.3 Motivation and Aims of the Study**

This study is motivated by three major factors which are explained below.

First, Thai university students have studied English for many years since kindergarten or primary schools but their English proficiency is rather low. This may be due to the fact that they do not have opportunities to read a lot. Most of the class time is devoted to learning *about* the language, that is learning grammar and learning to read through translation. Students are taught in a traditional way. They approach their reading assignment by putting all their effort and concentration into the passages they read. They carefully read the passage word by word. When reading and encountering an unfamiliar word, they stop reading and look up the meaning of the word in a dictionary. This reading behavior not only slows down their reading speed, but also hinders their reading comprehension (Nuttall 1982). Moreover, RMUTT students have never been exposed to outside reading because of the English syllabus and teachers. Neither the syllabus nor the teachers require students to do the supplementary reading, as can be seen from the following curriculum (course descriptions) of the English modules.

## Course Descriptions of English modules at RMUTT

<b>01-320-005</b> <b>3(3-0-3)</b>	<b>English Conversation 1</b>  <b>Prerequisite: 01-320-102 English 2</b> Words and phrases in everyday conversations: greetings and introductions, information enquiry, requests and offers, apologies and telephone conversation.
<b>01-320-009</b> <b>3(3-0-3)</b>	<b>English for Everyday Use</b>  <b>Prerequisite: 01-320-102 English 2</b> The use of English in greetings, introducing, giving directions. Development of reading and listening skills for everyday use: news, announcements, advertisements, telephoning, appointments, reservations, and shopping.
<b>01-320-011</b> <b>3(3-0-3)</b>	<b>Reading 1</b>  <b>Prerequisite: 01-320-102 English 2</b> Reading strategies. Setting reading objectives. Using a dictionary to find the meaning of words. Predicting the meaning of words from affixes, sentence structures and context. Clues such as references, discourse markers, etc. Use of prediction, interpretation, and background knowledge in reading. Finding main ideas, topic sentence and supporting details in a paragraph. Note-taking.
<b>01-320-012</b> <b>3(3-0-3)</b>	<b>Reading 2</b>  <b>Prerequisite: 01-320-011 Reading 1</b> Speed reading. Reading for details and specific purposes. Summary and opinions on reading texts.
<b>01-320-013</b> <b>3(3-0-3)</b>	<b>Writing 1</b>  <b>Prerequisite: 01-320-102 English 2</b> Features of spoken and written languages. Writing at sentence and paragraph levels. Forms. Letters. Diary. Memos. Summary and conclusion.
<b>01-320-014</b> <b>3(3-0-3)</b>	<b>Writing 2</b>  <b>Prerequisite: 01-320-013 Writing 1</b> Different types of writing. Announcements. Advertisements. Specifications. Letters. Critiques. Summaries. Self-correction and peer correction.
<b>01-320-017</b> <b>3(3-0-3)</b>	<b>English for Career 1</b>  <b>Prerequisite: 01-320-102 English 2</b> Career-based English. English to serve needs of learners in their future careers.

<b>01-320-018</b> <b>3(3-0-3)</b>	<b>English for Career 2</b>  <b>Prerequisite: 01-320-017 English for Career 1</b> Set situations concerning learners future work. Situational based practices of all four skills (listening, speaking, reading and writing) within the context of learners' future careers. Practice of oral skills in the sound laboratory.
<b>01-320-101</b> <b>3(3-0-3)</b>	<b>English 1</b>  Conversation related to greetings and introductions. Requesting, thanking and apologizing. Reading and writing instructions. Descriptions. Explanation of past, present and future events. Main idea. Summary. Answering questions. Appropriate vocabulary, expressions and structures, for note taking.
<b>01-320-102</b> <b>3(3-0-3)</b>	<b>English 2</b>  <b>Prerequisite: 01-320-101 English for 1</b> A practice of four skills. Searching for main ideas and details. Developing techniques for finding the meaning of vocabularies and expressions in paragraphs.

The situation mentioned above is contrast with that of the researcher. When studying at high school level, every semester the researcher had to read at least two graded readers including taking the tests. She continued doing the outside reading as a requirement in several English modules while studying for a bachelor's degree. It would then be noted that one reason for the poor situation in foreign language (FL) education in Thailand is an ineffective teaching approach. Most teachers rely on a traditional grammar-translation approach which emphasizes the explicit teaching of discrete points of grammar, and the learners are required to build up their language proficiency from the bottom-up (Brown 1994).

From the account above, the researcher's concern has been that teachers focus more on language development (i.e. syntax, vocabulary etc.) than on reading development and practice. Students need more time to *use* the language and reading is a *use* of language (Rivas 1999: 13). This research is reinforced by

the notion that a balanced approach seems to be the most suitable, focusing both on language and reading skills (William 1984). Students need to read extensively: students need to learn by reading (Alderson 2005: 29, Grabe 1991, and Nuttall 1982). The English curricula focus predominantly on grammar and thus decrease reading at the lower level. Students thereby have not had enough exposure to FL text to have acquired sufficient fluency in basic decoding and word recognition (Walter 2005). This may undermine the language learning process and does not prepare the students to meet the demands of adult literacy in a foreign language.

Second, according to Jarvis and Atsilarat (2004)'s study of practitioner and student attitudes towards CLT (Communicative Language Teaching) in Thailand, one of the students' results reveals that the teacher should spend a lot of time on language tasks such as role play, games, group and pair work instead of teaching grammar and vocabulary. They assert that "the educational framework for a context-based approach (C-bA) is that language learners learn best in teaching and learning environments that are harmonious with their learning styles and expectations – this is greatly influenced by culture" (Jarvis and Atsilarat 2004: 11). From this notion, it is of interest to implement ER at RMUTT as a supplement to the grammar syllabus and grammar-translation method which is opposite to the needs of Thai students: that is learning by doing. This suggests, to some extent and in a certain situation, that the students prefer to interact with their classmates and perform more learner-centred tasks in a supportive atmosphere than receiving instructions about grammar and vocabulary in a teacher-centred classroom. Consequently, ER is proposed as an alternative approach to allow students to perform their own activities.



Third, the use of ER in teaching and learning is not new. It was first proposed by Harold Palmer in 1917 (Day and Bamford 1998) and has been researched and practised for over seventy years at various educational levels in several parts of the world, for example in Europe (Camiciottoli 2001, Pigada and Schmitt 2006, Tudor and Hafiz 1989), in North America (Hitosugi and Day 2004, Leung 2002, Maxim 2002), in Asia (Al-Homoud and Schmitt 2009, Apple 2005, Asraf and Ahmed 2003, Bell 1998, Chiang 2009, Elley 1991, Lai 1993, Lituana et al 1999, Mason and Krashen 1997, Taguchi et al 2004, Tsang 1996, Zhang 2004), in North Africa (Schleppegrell 1984), and in the South Pacific Ocean (Elley and Mangubhai 1983).

A body of research has revealed its benefits, for instance gains in reading ability (Elley 1991), reading fluency (Robb and Susser 1989), spelling (Polak and Krashen 1988), writing (Lai 1993), speaking (Cho and Krashen 1994), vocabulary (Yamazaki 1996), listening (Elley and Mangubhai 1983), and grammar (Mason 2003). However, in Thailand ER is seldom developed or put into practice in the classroom and applied in real life. EFL instruction in many parts of Thailand is mostly accomplished through a traditional learning model, the grammar-translation method. Students are teacher-dependent and book-dependent, as seen in RMUTT. Accordingly, the current study will, to the researcher's knowledge, be the first to introduce ER as a practice in formal EFL classroom settings in Thailand at the university level where students have ample time for self-study and have achieved a certain level of foreign language proficiency so that they can successfully read authentic texts -- a language proficiency threshold (Clarke 1980), meaning that second language readers must reach a level of general language competence in order to read successfully in the target language (Devine

1988). In other words, language proficiency is viewed as a precondition for reading proficiency; RMUTT students have already crossed a linguistic threshold before and it is expected that they are to be able to read the graded reader books successfully.

#### **1.4 Scope and Limitations of the Study**

The scope of this research is defined as an investigation into ER in Thailand. Therefore, the study is limited to the context of Thailand. The subjects in the study involve Thai undergraduate students enrolled in the English 2 Course (01-320-102) at the Faculty of Liberal Arts, RMUTT. The students come from different disciplines including Engineering, Business Administration, and Science.

This study has two stages, which have been carried out in Thailand. The first empirical stage, a pilot study which was conducted in the second half of the second semester 2007 academic year for two months (after the midterm examination), investigates the instruments and procedures used in the study. In this stage, reading comprehension tests, and a questionnaire on attitudes toward ER including graded readers were targeted at students from different faculties at RMUTT, Thailand. It, then, focuses on examining the reliability and validity of the instruments based on primary data obtained from RMUTT students who have the same background as the subjects of the study. Additionally, the lesson plan prepared for the actual experiment was tried out during the eight-week teaching of English 2.

The second stage of the research employs the experimental methods and was conducted at the same university, RMUTT, in the first semester of the academic year 2008 for one semester (four months). There were six identical

groups of participants in terms of comparability in English proficiency, two of which were experiment groups while the other four were control groups.

The findings on reading comprehension and reading fluency are mainly based on reading assessments, i.e. written recall protocol, translation and multiple-choice tests, whereas learners' attitudes are based on a survey questionnaire and an individual interview conducted by the researcher.

Since research findings can be interpreted differently in different contexts, details provided about the characteristics of the students who took part in the study as well as the research tools involved should help to reveal the scope of the study which will be presented in chapter 3 and the extent of the implications which will be discussed in chapter 5.

## **1.5 Organization of the Thesis**

This thesis comprises five chapters. A brief summary of the content of each chapter is described as follows:

- Chapter 1 sets out the rationale of the study, motivation and aims of the study, the scope and limitations of the study and organization of the thesis.
- Chapter 2 reviews the literature pertaining to reading theory and extensive reading. It consists of two main sections. The first section depicts theories of reading, basic approaches to understanding reading and models of reading. The second section details definitions of extensive reading, outlines its characteristics and the concept of ER in FL and explores previous ER studies in FL/L2 settings as well as their limitations which lead to the research questions of the current study. Every section in this chapter aims to provide a theoretical and empirical basis for chapter 3, research methodology.

- Chapter 3 presents a detailed description of methodology employed in the study, discusses the research design, presents the context of the study including the description and the rationale for the sample, the data collection process, a description of the instrument and the methods of analysis that have been used. This chapter also reports the pilot study including its methodology and findings.
- Chapter 4 deals with the results of the investigation pertaining to each of the research questions. It, firstly, concerns the results of the quantitative analysis, i.e. the statistical analysis of the pre- and post-tests of reading comprehension, the timed reading tests for reading fluency as well as a questionnaire on attitudes toward extensive reading. It, then, reveals the qualitative analysis of data from individual interviews about the books the students have read and their attitudes toward extensive reading. The findings presented this chapter will be discussed in the Chapter 5.
- Chapter 5 presents a summary of the main study and discusses the findings of the research. It then suggests the pedagogical implications for English teaching and learning in the Thai context and presents some limitations of the study. Finally, the chapter proposes some recommendations for future research together with conclusions.

## **CHAPTER 2**

### **REVIEW OF LITERATURE**

#### **2.1 Introduction**

This chapter reviews previous research in order to establish what is known within the field. Murray (2002: 115) describes several key questions the answers to which can be treated as a guideline for conducting a literature review. These questions are: Why is the subject of this study important? Who else thinks that this study is important? Who has done something similar to this work? What can be adapted to this study? What are the gaps in the research?

This review of literature is divided into three main themes: theory of reading, definition of extensive reading (ER), and previous ER research. The knowledge obtained not only contributes to the research process but also reveals differences and gaps between previous studies and this research, thereby confirming the significance of this study.

## **2.2 Theory of Reading**

### **Definition of Reading**

The earliest definition of reading can be traced back to Huey (1908). Huey viewed reading as gathering or choosing from what was written, suggesting that constant feeling of values which goes on in all effective reading. Huey was concerned with the process used to gain information from the printed page and focused particularly on the ideas represented in printed form and the means by which the mind takes note of them (Glazor et al. 1990). Thorndike (1917: 323-332) characterized reading as reasoning and assumed that it was an active process related to problem solving. Huey's and Thorndike's ideas are predecessors of current models that describe reading as more than the interpretation of orthographic symbols. They reflect the belief that reading requires both visual and non-visual information, which supports recent findings that prior knowledge about experience involving language – the syntactic, semantic, and orthographic elements used to create text – is stored in the reader's mind, enabling them to predict meaning (Glazor et al. 1990: 1-3). Smith (1994: 171-182) defined reading as an interaction between readers, writers, and the text. Reading is thinking and can never be separated from the purpose, prior knowledge, and feelings of the person engaged in the activity nor from the nature of the text being read. The

conventions of texts permit the expectations of readers and the intentions of writers to meet.

Reading is viewed as a process. Goodman (1970) characterized the reading process as one of sampling, predicting, testing, and confirming, which he called a psycholinguistic guessing game. Reading is a complex cognitive process (Grabe 1991) because it involves a great deal of precise knowledge which must be acquired or learned and many processing strategies which must be practiced until they are automatic (Birch 2002). The common view of reading consists of decoding/word recognition and general comprehension or problem-solving skills (Alderson 2005). Fluent reading is rapid, purposeful, interactive, comprehending, flexible and gradually developing (cf. Anderson, Hiebert, Scott, and Wilkinson 1985, Grabe 1988, Hall, White and Guthrie 1986, Smith 1982, cited in Grabe 1991). Understanding the process of reading is important to an understanding of the nature of reading. Reading which is defined as practically synonymous with reading comprehension is a complex behavior which involves conscious and unconscious use of various strategies, including problem-solving strategies, to build a model of the meaning which the writer is assumed to have intended (Johnston 1983).

## **Process of Reading**

With reference to Alderson (2005), the process of reading is what we mean by 'reading' proper: the interaction between the reader and the text. The process is silent, internal, private, dynamic, variable, and different for the same reader on the same text at a different time or with a different purpose in reading. Several methods are used to investigate the reading process such as miscue analysis, which analyses the mistakes readers make when reading aloud and introspection through think-aloud protocols or verbal retrospection in interview.

An alternative approach to examining the process of reading is to inspect the product of reading and to compare that product to the text originally read. Alderson (2005: 4-5) argued that although different readers may engage in very different reading processes, the understanding will be similar. Thus, although there may be different ways of reaching a given understanding, what matters is not *how* you reach that understanding, but *the fact that* you reach it. That is, the focus is on what one has understood. There are at least two limitations to the product approach to reading: one is the variation in the product, the other is the method used to measure the product. 'Variation in the product' conveys the meaning that what readers understand from text varies. Different readers will develop somewhat different understandings of what a text 'means' since readers differ in their knowledge and experiences, then the products of reading will also differ. In measuring the product, the problem is the method of assessing the product of understanding or the reading product – comprehension. Examples of problems can be seen in these cases.

- If the method involves a reader recalling what he has read without recourse to the text such as in the use of recall protocol,



interview or summary test, then it will be difficult to distinguish understanding from remembering

- If the method of testing is unfamiliar to readers, then one risks a test-method effect.
- If the method (e.g., cloze technique or gap-filling) induces some readers to read in a particular way, then it will be difficult to generalize from a specific test performance to an ability to read.

### **2.3 Basic Approaches to Understanding Reading**

Some researchers (i.e. Kintsch and van Dijk 1978, Rumelhart and Ortony 1977, Winograd 1977) have applied an information processing analogy to help understand the reading process (Mikulecky 1990), that is to interpret the reading process by means of simple controlling metaphors. The three popular metaphors to dominate reading refer generally to reading processes: bottom-up (primary emphasis on textual decoding), top-down (primary emphasis on reader interpretation and prior knowledge), and interactive processing (Grabe 1991). These three perspectives on reading are explained below.

Bottom-up and top-down can be considered as processes, strategies, modes or approaches. When a person reads, two aspects of the ‘human information processing system’ continuously interact. When the reader focuses primarily on what is already known in trying to comprehend a text, this strategy is called a concept-driven or “top-down” mode. On the other hand, when the reader relies primarily on textual information to comprehend, this strategy is called a data-

driven or “bottom-up” mode (Rumelhart 1980). These two processing strategies are similarly considered as two different approaches taken by readers.

### **Top-Down Approaches**

Top-down approaches emphasize the importance of schemata (i.e. networks of information stored in the brain which act as filters for incoming information), and the reader’s contribution, over the incoming text.

### **Bottom-Up Approaches**

Bottom-up approaches are series models where the reader begins with the printed word, recognizes graphic stimuli, decodes them to sound, recognizes words and decodes meanings. Each component involves subprocesses which take place independently of each other, and build upon prior subprocesses. Bottom-up approaches owe much to the work of Smith (1971) and Goodman (1969, 1982) (Alderson 2005).

In practice, these two processing strategies are employed interactively and simultaneously as the reader tries to relate the new information in the text to what is already known. But the two modes are not used equally. According to Stanovich’s interactive compensatory model of reading, “a deficit in any knowledge source results in a heavier reliance on other knowledge sources, regardless of the level in the processing hierarchy” (1980: 63). In other words, a reader will rely on knowledge about a known topic to sort out word meaning; conversely, a reader who has mastery of the text’s vocabulary but is unfamiliar with the topic will rely on word knowledge in order to comprehend a text (Mikulecky 1990: 3).

## **Interactive Approaches**

Interactive approaches to reading are another perspective on reading. According to Grabe (1991), the term *interactive approaches* can refer to two different conceptions:

First, the term ‘interactive approach’ refers to the general interaction which takes place between the reader and the text. The reader (re)constructs the text information based in part on the knowledge drawn from the text and in part from the prior knowledge available to them (Barnett 1989, Carrell and Eisterhold 1983).

Second, the term ‘interactive approach’ refers to the interaction of many component skills potentially in simultaneous operation; the interaction of the cognitive skills leads to fluent reading comprehension. This means reading involves both an array of lower-level rapid, automatic identification skills and an array of higher-level comprehension/interpretation skills (Carrell 1988, 1989, Eskey 1986, Eskey and Grabe 1988, Rayner and Pollatsek 1989, Samuel and Kemil 1984). The two perspectives are complementary, though most cognitive psychologists and education psychologists stress the interaction-of-skills arrays; in contrast, most second language researchers stress the interaction between the reader and the text.

## **Schema Theory**

Schema theory is a theoretical metaphor for the reader's prior knowledge (Grabe 1991: 384). A schema is a general idea about a set of similar or related concepts (Mikulecky 1990: 4). According to Rumelhart and Ortony (1977: 101),

Schemata are data structures for representing the general concepts stored in memory. They exist for generalized concepts underlying objects, situations, events, sequences of events, actions, and sequences of actions. Schemata are not atomic. A schema contains, as part of its specification, the network of interrelationships that is believed to generally hold among the constituents of these concepts. Although it oversimplifies the matter somewhat, it may be useful to think of a schema as analogous to a play with the internal structure of the schema corresponding to the script of the play. A schema is related to a particular instance of the concept that it represents in much the same way that a play is related to a particular enactment of the play.

However, many psychologists and psycholinguists now question the usefulness of schema theory to account for the comprehension process. One issue is *how* prior knowledge is called up from memory and how it is then used in understanding. The problem is that schema theory does not lead to explicit definitions or predictions of processes of understanding, although it has clearly provided a powerful incentive to research into the products of understanding for first- as well as second-language readers (Alderson 2005: 18-19, Grabe 1991).

## **2.4 Models of Reading**

The choice of the model of reading has implications for what and how one assesses reading (Alderson 2005). The metaphor or model is a pedagogical tool that permits explanation of some of the complexities of reading in a systematic way (Birch 2002). There are several models of reading from which the reading process has been developed on the basis of these perspectives such as the following (Nuttall 2005; Silberstein 1994, Smith 1971).

### **Model 1**

Reading is viewed as a communication process. The sender, encoder, or writer has a message in mind (an idea, a fact or a feeling) which she wants somebody else to share, so she must put it in words first (or she must decode it) and then send it out as a written text. The text is accessible to the mind of another person who reads it, and then may decode the message it contains. After being decoded, the message enters the mind of the decoder and communication is achieved. This model is too simple, for things can go wrong at any stages because the writer cannot be sure the reader has received the message intended (Nuttall 1985: 4-5).

### **Model 2**

The second view of reading is that the text is full of meaning like a jug full of water; the reader's mind soaks it up like a sponge. In this view, the reader's role is passive; all the work has been done by the writer and the reader has only to open his mind and let the meaning pour in. This model is rejected. One reason is that not all meaning in the text actually gets into the reader's mind. The fact that

the meaning is in the text is unfortunately no guarantee that the reader will get it out since a text that seems easy to one person may seem difficult to another (Nuttall 1985: 4-5).

So the reader and the writer should have something in common if communication is to take place. This common element is shared experience including knowledge of language, attitudes, beliefs, values and all the unspoken assumptions shared by people brought up in the same society. How readers are able to interpret the text depends on the schemata (background knowledge) activated by the text; and whether readers interpret successfully depends on whether their schemata are sufficiently similar to the writer's (Nuttall 1985: 7).

Reading also involves reader expectations which are based on readers' prior knowledge. Background knowledge that aids in text comprehension has recently been studied. This theoretical framework emphasizes the role of pre-existing knowledge (a reader's 'schemata') in providing the reader with information that is implicit in a text. From this perspective, text comprehension requires the simultaneous interaction of two modes of information processing: top-down processing and bottom-up processing.

### **Model 3**

Reading as an interaction based on co-operative principle, that is the reader assumes that he and the writer are using the same code (the same language); that the writer has a message; and that the writer wants the reader to understand the message. Therefore, reading, according to this view, is an *interactive process* because both reader and writer depend on one another (Nuttall 1985: 11).

#### **Model 4**

This model is that of top-down processing. In this process, readers draw on their own intelligence and experience to understand the text (Nuttall 1985: 16). Top-down knowledge based or conceptually driven information processing occurs when readers use prior knowledge to make predictions about the data they will find in a text. Activities that assist students in gaining or accessing background knowledge facilitate the top-down processing (Nuttall 2005; Silberstein 1994). Formats typically suggested to develop top-down processing skills include reading within a topic area (content-centered instruction) and extensive reading or sustained silent reading (SSR), in which students read large amounts of text for general comprehension (Nuttall 2005; Silberstein 1994).

#### **Model 5**

This model is that of bottom-up processing. The reader builds up a meaning from the black marks on the page recognizing letters and words, and working out sentence structure. Bottom-up reading requires language processing at all levels: word, sentence, and discourse (Nuttall 2005: 16-17; Silberstein 1994). This knowledge is also termed 'data driven', because it is evoked by the incoming data.

Both top-down and bottom-up processing are used to complement each other and are complementary ways of processing the text. In practice, a reader continually shifts from one focus to another, now adopting a top-down approach to predict the meaning, then moving to the bottom-up approach to check whether that is really what the writer says. This has known as *interactive reading* (Nuttall

2005: 17). A successful reader requires skills in both top-down and bottom-up processing.

### **Model 6**

A psycholinguistic model of reading or a model of reading as a psycholinguistic guessing game is an interactive model. This metaphor (Eskey, 1979: 69) has become commonplace for describing second language reading since Goodman coined it in 1967 and is still in use today (Underwood and Batt 1996: 78-79). According to Grabe (1991: 336-337), by the mid- to late 1970s, many researchers began to argue for a theory of reading based on the work of Goodman (1967, 1985) and Smith (1971, 1979, 1982). Goodman's research led him to propose that reading is not primarily a process of picking up information from the page in a letter-by-letter, word-by-word manner. He argued that reading is a selective process. Since it did not seem likely that fluent readers had the time to look at all the words on a page and still read at a rapid rate, it made sense that good readers used knowledge they brought to the reading and then read by predicting information, sampling the text and confirming the prediction. Smith concurred with Goodman's arguments that reading was an imprecise, hypothesis-driven process. He further argued that sampling was effective because of the extensive redundancy built into natural language as well as the ability of readers to make the necessary inferences from their background knowledge. The reader contributed more than did the visual symbols on the page. This theory has been influential on ESL reading theory and instruction from the late 1970s to the present.



### **Model 7**

Coady (1979) reinterpreted Goodman's psycholinguistic model as a model more specifically suited to second language learners. Coady argued that a conceptualization of the reading process requires three components: process strategies, background knowledge, and conceptual abilities. Beginning readers focus on process strategies (e.g. word identification), whereas more proficient readers shift attention to more abstract conceptual abilities and make better use of background knowledge, using only as much textual information as needed for confirming and predicting the information in the text. His implications for teaching are similar to those of Clarke and Silberstein (1977), that is reading was characterized as an active process of comprehending and students needed to be taught strategies to read more efficiently (e.g. guess from context, define expectations, make inferences about the text, skim ahead to fill in the context, etc.) (Grabe 1991).

### **Model 8**

This model is the six components of reading process. Due to the view of reading as a complex process which many researchers attempt to understand and explain, the reading process is analyzed into a set of component skills (e.g. Carpenter and Just 1986; Carr and Levy 1990; Haynes and Carr 1990; Rayner and Pollatsek 1980), proposed by Grabe (1991) on a basis of empirical studies. This is a 'reading components' perspective based on a component skills approach. With reference to Grabe (1991: 375-406), the six general skills and knowledge areas include the following specific skills and knowledge.

### **1) Automatic Recognition Skills**

Automaticity may be defined as occurring when the reader is unaware of the process, not consciously controlling the process, and using little processing capacity (Adam 1990; Just and Carpenter 1987; Stanovich 1990). Many researchers now believe that automatic lexical access is a necessary skill for fluent readers, and many less skilled readers lack automaticity in lower-level processing. The question of whether syntactic structures fall within the notion of automatic recognition is currently being debated (e.g. Flores d'Arcais 1990; Perfetti 1990; Rayner and Pollatsek 1989); Perfetti (1990) has argued that the syntactic parser creates an autonomously driven initial structure which is then open to semantic and discourse contextual effects.

### **2) Vocabulary and Syntactic Knowledge**

In terms of critical reading, the vocabulary of fluent readers in a second language is far lower in total numbers of words than in first language reading (which range from 10,000 words to 100,000 words), often between 2,000-7,000 words (Coady 1983; Kyongho and Nation 1989; Nation 1990; Swaffar 1988). The consequence of the argument is that fluent readers need a sound knowledge of language structure and a large recognition vocabulary.

### **3) Formal Discourse Structure (Formal Schemata)**

Readers need a good knowledge of formal discourse structure (formal schemata). There is considerable evidence that knowing how a text is organized influences the comprehension of the text. For example, Carrell (1984) has shown that more specific logical patterns of organization, such as cause-effect, compare-

contrast, and problem-solution, improve recall compared to texts organized loosely around a collection of facts.

#### **4) Content and Background Knowledge (Content Schemata)**

Content and background knowledge also has a major influence on reading comprehension. A large body of literature has argued that prior knowledge of text-related information strongly affects reading comprehension (Alderson and Pearson 1984; Bransford, Stein and Shelton 1984; Kintsch and van Dijk 1978; Wilson and Anderson 1986). Similarly, cultural knowledge has been shown to influence comprehension (Carrell 1984; Pritchard 1990; Steffenson and Joag-Dev 1984).

#### **5) Synthesis and Evaluation Skills and Strategies**

These skills and strategies are critical components of reading abilities. Fluent readers do not use prediction to decide upcoming words in texts or to access words; rather, prediction help readers anticipate later text development and the author's perspective with respect to the information presented. In this way, predicting information allows readers to evaluate the information; take a position with respect to the author's intentions; and decide whether or not the information is useful.

## **6) Metacognitive Knowledge and Self Monitoring**

This is the final important component of fluent reading skills. Metacognitive knowledge may be defined as knowledge about cognition and the self-regulation of cognition (Baker and Brown 1984; Brown, Armbruster and Baker 1986). Knowledge about cognition including knowledge about language, involves recognizing patterns of structure and organization, and using appropriate strategies to achieve specific goals (e.g., comprehending texts, remembering information). As related to reading this would include recognizing the more important information in a text; adjusting reading rate; using context to sort out a misunderstood segment; skimming portions of the text; previewing headings; pictures, and summaries; using search strategies for finding specific information; formulating questions about the information; using a dictionary; using word formation and affix information to guess word meanings; taking notes; underlining; summarizing information; and so on. Monitoring of cognition involves recognizing problems with information presented in the texts or an inability to achieve expected goals (e.g., recognizing an illogical summary or awareness of noncomprehension). Self-regulation strategies include planning ahead, testing self-comprehension, checking effectiveness of strategies being used, revising strategies being used, and so on.

The ability to use metacognitive skills effectively is widely recognized as a critical component of skilled reading. In numerous studies it has been shown that good readers are more effective in using metacognitive skills than less fluent readers.

## **Summary of Theories and Models of Reading**

From the above review of literature on reading theories, a definition of reading and comprehension as well as models of reading in relation to this study can be summarized as follows:

“Reading is the process of receiving and interpreting information encoded in language form via the medium of print” (Urquhart and Weir 1998: 22), and “Comprehension occurs when the reader extracts and integrates various information from the text and combines it with what is already known” (Koda 2005: 4).

“Reading is an *interactive process* in two ways. Reading combines many cognitive processes working together at the same time. Reading is also interaction between the reader and the writer. The text provided information that the author wants the reader to understand in certain ways. The reader also brings a wide range of background knowledge to reading, and she or he actively constructs the meaning of the text by comprehending what the writer intends and by interpreting it in terms of the background knowledge activated by the reader” (Grabe 2009: 15).

### **2.5 Definitions of Extensive Reading (ER)**

Extensive reading (ER) has been defined in various ways by educators, researchers, and reading specialists. The first person to apply the term ‘extensive reading’ in foreign language (FL) or second language (L2) pedagogy (Louis 1969 cited in Day and Bamford 1998: 5) was Harold Palmer (1936), one of the most prominent applied linguists in British twentieth-century language teaching (Richards and Rodgers 2003), who defines the extensive reading as rapidly

reading book after book where the reader's attention should be on the meaning, not the language of the text. He chose the term 'extensive reading' to distinguish it from intensive reading (IE) which often refers to 1) the careful reading (or translation) of shorter, more difficult foreign language texts with the goal of complete and detailed understanding, and 2) the teaching of reading in terms of language skills by studying reading texts intensively in order to practise reading skills such as distinguishing the main idea of a text from the detail, finding pronoun referents, or guessing the meaning of unknown words (Bamford and Day 1997).

Michael West, who designed the methodology of extensive reading, calls it 'supplementary reading' (1926). Elley (1981) calls it 'book flood' while Mikulecky (1990) calls it 'pleasure reading' and Krashen (1993) terms it 'free voluntary reading'. Although different terms are made, they have the same basis in theory as the first term used.

Another definition of extensive reading is that it is a 'style' or 'way' of reading in language-teaching terms. The four suggested styles are skimming, scanning, intensive, and extensive reading (William and Moran 1989). It is also a reading subskill like scanning and skimming (Field 1985; Munby 1979) and a strategy. That is, according to Brown (1994: 297-298), extensive reading is one of the two subcategories of silent reading (one of the two main types of classroom reading performance: oral and silent reading): intensive and extensive reading. Intensive reading is usually a classroom-oriented activity in which students focus on the linguistic features of a passage, i.e. grammatical forms, discourse markers, and other surface structure details for the purpose of understanding the literal meaning. It is also 'a totally content-related reading initiated because of subject-

matter difficulty'. Extensive reading consists of skimming, scanning (as strategies for gaining the general sense of the text), and global reading. It 'is carried out to achieve a general understanding of a text. All pleasure reading is extensive. It is a relatively rapid and efficient process of reading a text for *global* or general meaning'. Although these define extensive reading as a style, subskill, or strategy, they also differentiate the meaning between extensive and intensive reading, which is similar to that of the original one stated before.

The other definition of extensive reading derived from the implications in many works on extensive reading as an approach in teaching and learning language is the reading of graded readers. A graded reader is a book written by simplifying the language or an original work written in simple language (Hill and Thomas 1988). This definition is rather distorted because extensive reading itself does not necessarily involve graded readers. These books are used as a means of reading or as reading materials aiming to enhance students' language ability and reading skills in an extensive reading program. This is related to the next definition which is important to this research.

The relevant definition of extensive reading on basis of theory and practice which was developed from the earliest definition stated above is

... an approach to learning to read a second language, Extensive reading may be done in and out of the classroom. Outside the classroom, extensive reading is encouraged by allowing students to borrow books to take home and read. In the classroom, it requires a period of time, at least 15 minutes or so to be set aside for *sustained silent reading*, that is for students – and perhaps the teacher as well – to read individually anything they wish to.  
(Day and Bamford 1997: 7)

Bamford and Day (2005) also assert that extensive reading is reading large amounts of material to get an overall understanding while focusing on the meaning of the text than the meaning of individual words or sentences. In other words, the immediate focus is on the content being read, rather than on language skills (Lituanas et al. 1999). As an approach to teaching reading, it may be thought of in terms of purpose or outcome. Additionally, an extensive reading approach introduces students to 'the dynamics of reading as it is done in real life by including such key elements of real-life reading as choice and purpose.' That is, reading is an individual activity and thus the students can learn (read) at their own level and pace in their own time including when and where they choose. This resembles reading in their real life, and when students choose what they want to read based on their interest as well as their linguistic competence, this increases their motivation for learning and fosters them to engage in sustained silent reading (Day and Bamford, 1998; Davis 1995; Hitosugi and Day 2004; Krashen 1995; Nation 1997; Pigada and Schmitt 2006; Susser and Robb 1990; Taguchi et al. 2004).

Thus, in the early part of this century, extensive reading took on a special meaning in the context of teaching modern languages (Bamford and Day 1997). It is defined as an approach to foreign language teaching and learning in general, and as a method or procedure in the teaching and learning of foreign language reading in particular. The theory and practice of extensive reading has been worked out by pioneers such as Harold Palmer in Britain and Michael West in India, the parents of second language extensive reading in modern times (Day and Bamford 2004).



## 2.6 Characteristics of Extensive Reading (ER)

There are ten characteristics or principles of extensive reading as an approach or a language teaching/learning procedure, which have been identified as key factors in successful extensive reading programs (Bamford and Day, 1997).

(1) *Students read as much as possible*, perhaps in and definitely out of the classroom.

Day and Bamford (2002: 3) emphasize that the amount of time students actually spend on reading is the most critical element in learning to read. Hence, to achieve the benefits of extensive reading and to establish a reading habit, the minimum amount of reading is a book a week, which is ‘a realistic target for learners of all proficiency levels, as books written for beginners and low-intermediate learners are very short’.

(2) *A variety of materials on a wide range of topics is available* so as to encourage reading for different reasons and in different ways.

It is recommended that to encourage a desire to read, the texts should be varied and based on the purposes for which the students want to read, e.g., books, magazines, newspapers, fiction, non-fiction, texts that inform, texts that entertain, general, specialized, light, serious (Day and Bamford 2002). To find what the students are interested in reading, as in Williams’ advise (1986: 42), “Ask them what they like reading in their own language, peer over their shoulders in the library, ask the school librarians...”. Varied reading material encourages both reading and a flexible approach to reading -- students read for different reasons and in different ways e.g., skimming, scanning, more careful reading.

(3) *Students select what they want to read* and have the freedom to stop reading material that fails to interest them.

Self-selection of reading material is the key to extensive reading. Students can select texts as they do in their own language, that is, they can choose texts they expect to understand, to enjoy, or to learn from. They are free to stop reading material that is boring, too easy, or too difficult (Hitosugi and Day, 2004; Day and Bamford, 2002).

(4) *The purposes of reading are usually related to pleasure, information, and general understanding.* These purposes are determined by the nature of the material and the interests of the students.

In an extensive reading approach, learners are encouraged to read for the same kinds of reasons and in the same ways as the general population of first-language readers. This sets extensive reading apart from usual classroom practice, and reading for academic purposes. The one hundred percent comprehension or any particular objective level comprehension is not a goal. In terms of reading outcome, the focus shifts away from comprehension achieved or knowledge gained and towards the reader's personal experience (Day and Bamford, 2002).

(5) *Reading is its own reward.*

Bamford and Day (1997) recommend that there are few or no follow-up exercises to be completed after reading. This view, later, is adjusted by Hitosugi and Day (2004) that although the goal is for students to experience reading and so they are not required to show their understanding by answering comprehension

questions, the teachers may need to ask the students to engage in follow-up activities after reading for these reasons:

- 1) to discover what the student understood and experienced from reading;
- 2) to keep track of what students read;
- 3) to monitor the students' attitude toward reading; and
- 4) to link reading with other aspect of the curriculum

(6) *Reading materials are well within the linguistic competence of the students in terms of vocabulary and grammar.* Dictionaries are rarely used while reading because the constant stopping to look up words makes fluent reading difficult.

Day and Bamford (2002) recommend that texts must be well within the learners reading competence in the foreign language. For beginning readers, more than one or two unknown words per page might make the text too difficult for overall understanding. For intermediate learners, there should be no more than five difficult words per page. Hu and Nation (2000) suggest that learners must know at least 98% of the words in a fiction text for assisted understanding. They refer to Fry's (1991: 8) observation that beginner readers do better with easier materials.

(7) *Reading is individual and silent.*

Students read at their own pace. Most ER is done outside class, as homework, in the students' own time, when and where the student chooses (Hitosugi and Day 2004; Day and Bamford 2002).

(8) *Reading speed is usually faster rather than slower.*

Students can read faster because the materials are easy and understandable. They move from word-by-word decoding to fluent reading. They are advised against using dictionaries as it interrupts the reading process, making fluent reading impossible. If they encounter unknown words, they should ignore them or guess their meanings (Hitosugi and Day 2004; Day and Bamford 2002). Nuttall (1996: 128) notes that speed, enjoyment and comprehension are closely linked with one another. She described the vicious circle of the weak reader as follows: “Reads slowly; Doesn’t enjoy reading; Doesn’t read much; Doesn’t understand; Reads slowly...” (Ibid: 172). Extensive reading can help readers “enter instead the cycle of growth ... The virtuous circle of the good reader: Reads faster; Reads more; Understands better; Enjoys reading; Reads faster...”

(9) *Teachers orient students the goals of extensive reading, explain the methodology, keep track of what students read, and guide students in getting the most out of the program.*

Given that students may not be accustomed to the freedom of making choices at school, they need to be introduced to the practice of extensive reading. The teacher could begin by explaining the benefits of extensive reading -- that is it helps them gain in vocabulary knowledge, reading, writing and oral fluency. The choice of easy materials, self-selection and reading for overall understanding should be discussed. Teachers may point out that there are no tests or comprehension questions.

Nevertheless, in order to guide students during the course to ensure they get the most out of extensive reading experience, teachers need to keep track of what and how much their students read, and the students' reaction of what was read. Teachers also encourage them to read the books they previously found too difficult to read (Hitosugi and Day 2004; Day and Bamford 2002).

(10) *The teacher is a role model of reader for students.*

The teacher's role is an active member of the classroom reading community, demonstrating what it means to be a reader and the rewards of being a reader. If the teacher reads the same material that the students read, and talks to them about it, this gives the students a model of what it is to be a reader and also makes it possible for the teacher to recommend reading material to individual students (Hitosugi and Day 2004; Day and Bamford 2002).

## **2.7 Concepts of ER in Foreign Language (FL)/Second Language (L2)**

The concepts of ER in a foreign language (FL)/second language (L2) can be summarized and illustrated below:

- (a) extensive reading is an individual activity and learners can learn at their own level without being locked into an inflexible class program,
- (b) learners follow their interests in choosing what to read,
- (c) extensive reading provides the opportunity for learning to occur outside the classroom (Nation 1997),
- (d) students learn to read by reading (Smith 1994),

- (e) the best way to improve the knowledge of a foreign language is to go and live among its speakers. The next best way is to read extensively in it (Nuttall 1982: 168), and
- (f) extensive reading can provide comprehensible input -- language that learners read or hear that they can understand (Krashen 1982) and so improves language acquisition.

## **2.8 ER Studies in FL/L2 Settings: what they investigate and how?**

The goal of this section of the literature review is to describe previous research on L2 extensive reading that will be helpful in understanding the overall concepts of this study. This section will start by providing a review of the research that has been undertaken in investigating cognitive and affective gains, the former referring to students' intellectual abilities and skills while the latter refers to students' attitudes, feelings and values (Richards and Schmidt 2002), from exposure to ER in general, and in investigating gains in reading comprehension, and reading fluency in particular. It will be extended to describe the weaknesses found in past research. This brief review thus serves as an orientation toward examining cognitive and affective gains by using different measurements with the aim of filling the gap in this area.

### **Cognitive and affective gains from exposure to FL/L2 ER**

ER is an approach in which readers self-select materials from a collection of graded readers with the goal of reaching specified target times for silent sustained reading (Donnes 1999; Hill 1997). Graded readers are short books of fiction and non-fiction which are graded structurally and lexically (Bamford 1984:

218), i.e. they are controlled in terms of vocabulary and grammar and are grouped for particular age groups from primary (age 8) to adult (over 16). For example, the Edinburgh Project on Extensive Reading (EPER) contains approximately 550 titles published for a world market, coded after the title with a clear genre or subject like adventure, animal, fantasy, horror, humor and romance (Hill 2001). Other publishers include Cambridge, Heineman, Longman, Oxford, and Penguin (Simensen 1987). Extensive reading has been both a popular approach to learning and a research topic (Waring 2001). A large amount of experimental research has been conducted over the last 20 years in order to reveal its benefits in different aspects of language learning in EFL/ESL contexts which can be grouped into nine gains as listed below based on purposes of the studies. These nine gains are further categorized into two main groups: cognitive and affect gains, which will be discussed fully below.

- (1) gains in *reading ability* (Elley and Mangubhai 1983; Hafiz and Tudor 1989, 1990; Robb and Susser 1989; Elley 1991; Lai 1993; Cho and Krashen 1994; Lituanas, Jacobs and Renandya 1999; Hitosugi and Day 2004; Maxim 2000),
- (2) gains in *reading fluency* (Robb and Susser 1989; Lai 1993; Mason and Krashen 1997; Lituanas, Jacobs and Renandya 1999; Leung 2002; Taguchi, Takayasu-Maass and Gorsuch 2004),
- (3) gains in *grammar* (Elley and Mangubhai 1983; Hafiz and Tudor 1989; Mason 2003),
- (4) gains in *vocabulary* (Pitts, White and Krashen 1989; Day, Omura and Hiramatsu 1991; Cho and Krashen 1994; Yamazaki 1996; Mason and

Krashen 1997; Leung 2002; Waring and Takaki 2003; Pigada and Schmitt 2006),

(5) gains in *writing* (Elley and Mangubhai 1983; Janopolous 1986; Hafiz and Tudor 1989, 1990; Robb and Susser 1989; Hedgcock and Atkinson 1993; Lai 1993; Tsang 1996; Mason and Krashen 1997),

(6) gains in *spelling* (Polak and Krashen 1988),

(7) gains in *oral proficiency* (Cho and Krashen 1994),

(8) gains in *listening* (Elley and Mangubhai 1983), and

(9) gains in *motivation and attitudes* (Leung 2002; Takase 2003; and Hitosugi and Day 2004).

In this regard, the nine groups of gains can be themselves grouped into two main groups:

(1) gains in reading ability, reading fluency and grammar

(2) gains in vocabulary, writing, spelling, oral proficiency, listening, motivation and attitudes.

The former is relevant to this study, in that it aims to investigate gains in the first two areas mentioned in group (1) i.e. *reading ability* and *reading fluency* and the latter is dealt with this study with an aim to investigate gains in group (2) i.e. *attitude* towards reading and ER, both of which fit the context of the research in teaching and learning in academic EFL situation. Moreover, to the best of my knowledge, there is no investigation of gains in reading ability using multiple measurements to assess reading ability in an ER program (see Chapter 3, section 3.8 Measures).



### **Gains in reading ability, reading fluency and grammar (cognitive gains)**

This section was compiled from the ER research conducted as empirical studies, which are described in chronological order.

According to gains in reading ability, Elley and Mangubhai (1983) conducted a two-year study called a 'Book Flood' project on nearly 400 primary school students in Fiji. Results at the end of the first year showed that subjects receiving extensive reading had made a substantial improvement in receptive skills (reading and word recognition). By the end of the second year, this improvement had extended to all aspects of the subjects' L2 abilities, including both oral and written production. In sum, they found gains in reading and general proficiency, including improvement in listening and writing. Hafiz and Tudor (1989) conducted a study on male secondary school ESL Pakistani students taking part in a three-month extensive reading program in the UK, and found gains in reading and writing. Robb and Susser (1989) reported positive effects and gains in the reading proficiency of Japanese university students who had engaged in extensive reading. Elley (1991) found improvements in reading and listening comprehension, gains in attitudes toward reading and books, and positive affects toward English in primary school students the South Pacific island of Niue, in Fiji, and in Singapore. Lai (1993) performed an experiment on secondary students during a 4-week summer reading program in Hong Kong and found gains in reading comprehension, reading speed, and writing development. Cho and Krashen (1994) reported drastic attitudinal changes in four adult native speakers of Korean living the United States after the participants had read books in the Sweet Valley series designed for junior-high and high-school girls and written at

the six-grade level (which is extremely popular among high school girls) (Moffit and Wartella, 1992 cited in Cho and Krashen, 1994). They also found oral/aural language proficiency and vocabulary acquisition in addition to great enjoyment in reading light literature. Masuhara et al. (1996) compared the effectiveness of strategies training and extensive reading in second language comprehension of first-year English majors in a Japanese women's university over eight weeks. Extensive reading was found to be more effective for improving reading comprehension. Mason and Krashen (1997) studied Japanese university students engaging in extensive reading, and found gains in positive affect in addition to gains in reading proficiency. Lituanas, Jacobs and Renandya, (1999) found improvement in reading proficiency, reading speed and accuracy among secondary school students in the southern Philippines. Maxim (2000) found improvements in reading comprehension, language proficiency and positive attitude change in reading strategies of university students participating in German extensive reading programs in the United States. Hitosugi and Day (2004) reported an increase in reading ability and positive affect among university students in Hawaii who had engaged in Japanese extensive reading. Taguchi, Takayasu-Maass, and Gorsuch (2004) reported an increase in reading fluency, reading rate, reading comprehension and positive perceptions of reading activities among Japanese university students majoring linguistics in Tokyo. Leung (2002) conducted an adult's self-study of Japanese in Hawaii and found improvement in vocabulary acquisition, reading comprehension and a positive attitude.

With respect to gains in reading fluency, in addition to Robb and Susser (1989), Lai (1993), Mason and Krashen (1997), Lituanas, Jacobs and Renandya (1999), Taguchi, Takayasu-Maass, and Gorsuch (2004) also reported an increase

in reading fluency, reading rate, reading comprehension and positive perceptions of reading activities among Japanese university students majoring in linguistics in Tokyo.

Elley and Mangubhai (1983) and Hafiz and Tudor (1989), Mason (2003) similarly reported the development of grammatical accuracy in English among low intermediate Japanese female learners at the university level in Japan.

In sum, there are thirteen studies on gains in reading ability, five studies on reading fluency and three on grammar which revealed improvements due to exposure to reading extensively. Next, the remaining gains are summarized as an overview of past research, although, with the exception of attitudes, they are not investigated in this study.

**Gains in vocabulary, writing, spelling, oral proficiency, listening  
(cognitive gains), and motivation/attitudes (affective gains)**

In addition to Cho and Krashen (1994), Mason and Krashen (1997), and Leung (2002), Pitts, White and Krashen (1989) examined gains in vocabulary by conducting two experiments using adult students of ESL in the United States and reported that second language acquirers could acquire vocabulary incidentally from reading. Day, Omura, and Hiramatsu (1991) reported that incidental vocabulary learning occurred among both high-school and university Japanese students while reading silently for entertainment in the classroom. They used a reading passage containing 17 target words and a 17-item multiple-choice vocabulary test with five choices per item. Yamazaki (1996) reported on a nine-week experiment with high school students in Japan that the ER group had measurably improved in vocabulary although there was no statistically significant

difference between the two groups: ER and translation. Waring and Takaki (2003) examined the rate at which English vocabulary was learned from reading the 400 headword graded reader *A Little Princess*, using intermediate level female Japanese learners in Japan and found that words can be learned incidentally but that most of the words were not learned. Pigada and Schmitt (2006) performed a one-month case study in the UK, looking at vocabulary acquisition using a 27 year-old Greek learner of French and found an enhancement of spelling, meaning, and the understanding of the grammatical behavior of words in the text.

Further, Elley and Mangubhai (1983), Hafiz and Tudor (1989), Robb and Susser (1989), Hedgcock and Atkinson (1993), Lai (1993) as well as Mason and Krashen (1997), Janopolous (1986) studied gains in writing and reported a correlation between proficiency levels in L2 pleasure reading and writing among 7 language groups of graduate students in the United States. Tsang (1996) examined a group of Cantonese speaking students participating in three English programmes which included extensive reading in Hong Kong and found an improvement in writing skills in the extensive reading group whereas Polak and Krashen (1988) conducted three studies to determine whether a relationship exists between spelling competence and voluntary reading for ESL college students in the United States and found that voluntary reading helps spelling. Correspondingly, the results of the studies on gains in oral proficiency by Cho and Krashen (1994), gains in listening by Elley and Mangubhai (1983) and gains in motivation and attitudes by Leung (2002), Takase (2003), Hitosugi and Day (2004) and Yamazaki (1996) are all consistent with the other gains mentioned earlier.

In sum, there are eight studies on gains in vocabulary, eight studies on gains in writing, one on spelling, one on oral proficiency, one on listening and

four on motivation and attitudes which reveal that the body of research points in the same direction towards the efficacy of ER.

The research review discloses that ER has been found to effectively develop reading comprehension in EFL/ESL situations, greater reading speed, larger vocabulary, enhanced writing skills, greater grammatical accuracy, and higher levels of motivation as well as more positive attitudes towards foreign language learning. In terms of empirical studies, some important points have also been discovered. These will be presented in the next section.

## **2.9 Limitations of Previous ER Research**

Although the majority of previous research reports the positive effect of ER on FL/L2 learners, these results are suggestive rather than definitive. Moreover, in terms of empirical studies, there have been serious methodological problems-- lack of careful control of research design or flawed methodology, including incomplete reports (Coady, 1997; Nation, 1999 and Horst, Cobb and Meara, 1998 and Waring 2001). Some limitations are as follows.

- (1) In several studies, the researchers conducted the research on ER, using two classrooms and only one measure. Some experiments were not well-designed and controlled in terms of the piloting and trialing of the instruments used in the study, e.g. Lituanas et al (1999) and Lao and Krashen (2000).
- (2) A number of investigations involve contamination by the concurrent classes or outside exposure to the target language which may have affected the findings. This means that the data of the studies were affected by outside influences such as in the context of an already input-rich

environment where the study was conducted (e.g. Hafiz and Tudor 1989). Other factors influencing the study were the presence of the concurrent (English) classes or tuition that were not part of the study. This makes it difficult to determine whether gains were effected by ER or other factors (e.g. Robb and Susser 1989).

- (3) However, the most important factor affecting the results is the use of a single measure to assess reading comprehension, particularly multiple-choice tests (MCQ) which ER findings rely largely on. This is due to lack of control for guessing. This is because to answer the MCQ, multiple choices (three or four options including distractors and one correct answer) are supplied to students to select from and students simply choose among them. In order to control for guessing, test designers may provide an option of 'I don't know.' among the distractor choices based on a particular criterion for marking (see a sample of scoring method of MCQ in Appendix H3).

## **2.10 From FL/L2 ER research findings: what aspects of language should be examined?**

In regard to the preceding literature review, the efficacy of ER needs to be investigated further, and research improvements are necessary. This study attempts to fill in the gap in the effectiveness of ER in terms of methodological problems by using a double - controlled group design with multiple measures to investigate the effectiveness of ER on reading comprehension and reading fluency among Thai EFL university students at Rajamangala University of Technology Thanyaburi (RMUTT) in Thailand, the university where the research is

conducted. This study involves a controlled environment within a pure foreign language context. Learners are hardly exposed to the English language outside of class. This is a crucial condition since it is one of the weaknesses of past extensive reading research. Waring (2002) has specified that the learners' exposure of English besides the input provided in the experiment can bring about contamination due to outside influence during the experiment. For example, in Hafiz and Tudor's (1998) study, the learners were exposed to English in their daily life.

This study thus minimizes the external factors that can influence the results of the study during the period of experiment by using groups of participants studying only one English module. The participants do not study any other English subjects. Usually they study hard, particularly in their own major subjects. They had seven to eight three-hour modules per week in the 2<sup>nd</sup> semester when the study was conducted.

In addition to gains in reading ability, this research aims to examine attitudes toward ER due to the fact that despite the bulk of ER studies being quantitative with a focus on the benefits of ER programs to learners, only a handful of empirical studies have examined attitudes toward learning a foreign language (Hitosugi and Day 2004), reading in a foreign language (Leung 2002, Asraf and Ahmad 2003, Robb and Susser 1989, Takase 2003), and particularly ER itself (Robb and Susser 1989, Hassan 2003).

Although ER has been adopted, adapted and researched for many years in several countries in Southeast Asia including Japan, Singapore, Hong Kong and Malaysia, there is no report of ER research at a tertiary level in Thailand. Thai universities have not yet made use of or integrated ER in any parts of either

curriculum or instruction. In conclusion, owing to academic reasons, the setting of the study, linguistic behaviors, individual characteristics such as prior linguistic background and knowledge of participants in Thailand which are different from those in other countries whose findings showed the effectiveness of ER, it is of interest, beneficial and appropriate to investigate the claims of ER in the EFL Thai context.

### **Research Questions**

The study in turn examines both cognitive and affective domains pertaining to the effects of ER. It addresses the following three research questions.

RQ1 Will students' reading comprehension improve after exposure to ER?

RQ2 Will students' reading fluency improve after exposure to ER?

RQ3 Will students have a positive attitude toward ER after exposure to ER?



## **2.11 Chapter Summary**

This chapter focuses on two main related literatures: the theory of reading and ER. It has reviewed a theory of reading including definitions and process of reading, and basic approaches to understanding reading together with models of reading. The chapter, then, has presented definitions and characteristics of extensive reading (ER) and concepts of ER in FL/L2. It also has explored previous ER studies in FL/L2 settings regarding gains from exposure to ER as well as limitations, leading to the aspects of language that the present study investigates. The next chapter deals with the research methods used in the study and reports of the pilot study which was conducted prior to the main study to ascertain the strengths and weaknesses of the instruments to be used for the main data collection.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the research methods used to investigate the effects of ER discussed in the Chapter 2 by Thai EFL learners at Rajamangala University of Technology Thanyaburi (RMUTT). It includes the epistemological and philosophical stance (paradigms) of the research, the aims, objectives and hypotheses of the study, research questions, variables, the context and participants of the study, instruments used, and the process of data collection as well as the pilot study.

## **3.2 Epistemological and Philosophical Stance (Paradigms) of the Research**

### **3.2.1 Epistemologies**

Epistemologies are theories of knowledge. These can be grouped into two main types: objectivism and constructionism/subjectivism, as presented below (Crotty 1998, Richards 2003).

#### **Objectivism**

Objectivist epistemology holds that all objects in the world exist apart from any consciousness and that they are essentially just they are. This will be discussed further in the next in the subsection on positivism (in section 3.2.2 Philosophical Stance (Paradigm)).

#### **Constructionism**

Constructionism rejects the objectivist view of human knowledge. There is no objective truth waiting for us to discover it. Truth or meaning comes into existence in and out of our engagement with the realities in our world. There is no meaning without a mind. Meaning is not discovered but constructed. Different people may construct meaning in different ways, even in relation to the same phenomena (Crotty 1998: 8-9). Subjectivism claims that no object exists apart from consciousness, that the so called 'external world' is not external at all but a mental construct (Richards 2003: 35). In constructionism meaning is constructed out of something (the object), whereas in subjectivism meaning is created out of nothing. Meaning comes from nothing but an interaction between the subject and the object to which it is ascribed (Ibid).

### 3.2.2 Philosophical Stance (Paradigm)

A philosophical stance (paradigm) is a theoretical perspective informing the methodology and thus providing the context for the process and grounding its logic and criteria (Crotty 1998: 3). Philosophical perspectives or paradigms (worldviews or sets of basic beliefs) can be categorized into two main types: positivism and constructionism/interpretivism as follows.

#### **Positivism**

According to Guba (2000: 19-20), the basic belief system of positivism is rooted in a *realist* ontology, that is, the belief that there exists a reality *out there*, driven by immutable natural laws. The business of science is to discover the “true” nature of reality and how it “truly” works. The ultimate aim of science is to *predict and control* natural phenomena.

Once committed to a realist ontology, the positivist is constrained to practice an *objectivist* epistemology. If there is a real world operating according to natural laws, then the inquirer must behave in ways that put questions directly to nature and allow nature to answer back directly. The inquirer must stand behind a thick wall of one-way glass, observing nature as “she does her thing.”

The basic belief system (paradigm) of positivist inquiry can be summarized as follows:

*Ontology:*     *Realist* — reality exists “out there” and is driven by immutable natural laws and mechanisms. Knowledge of these entities, laws, and mechanisms is conventionally summarized in the form of time- and context-free generalization. Some of these latter generalizations take the form of cause-effect laws.

*Epistemology: Dualist/objectivist* – it is both possible and essential for the inquirer to adopt a distant, noninteractive posture. Values and other biasing and confounding factors are thereby automatically excluded from influencing the outcomes.

*Methodology: Experimental/manipulative* – questions and/or hypotheses are stated in advance in propositional form and subjected to empirical tests (falsification) under carefully controlled conditions.

In short, positivism entails a belief that only those phenomena which are observable can validly be warranted as knowledge. Positivism proclaims the suitability of the scientific method to all forms of knowledge and gives an account of what that method entails, divergent versions notwithstanding (Bryman 1993).

### **Constructionism/Interpretivism**

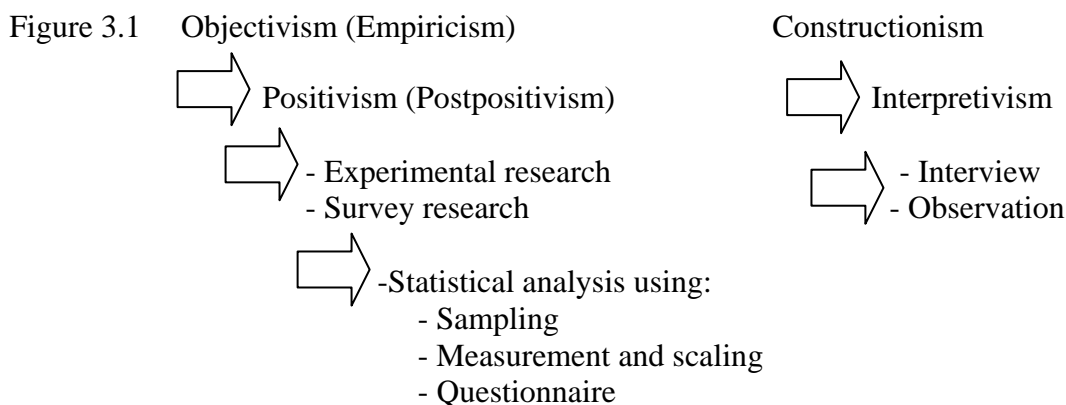
Constructionism is the view that all knowledge is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context (Crotty 1998: 42).

Interpretivism views human social action as inherently meaningful. To understand a particular social action (e.g. teaching, friendship, voting), the inquirer must grasp the meanings that constitute that action (Fay 1996, Outhwaite 1975 cited in Schwandt 2000: 191).

The rationale of the above classification is based on two types of research methodologies: 1) positivism/empiricism associated with quantitative methods and 2) constructionist or interpretivism dealing with qualitative methods (Dornyei 2007).

### 3.2.3 Selecting and Designing on Paradigms

From these epistemologies and theoretical perspectives, the researcher has selected and designed paradigms or lenses that are being used to view and understand the world of language ability (Lynch 2003) and ER-- the language program as depicted in Figure 3.1.



From the five elements in Figure 1 above, in the first column on the left, objectivism or empiricism refers to epistemology while positivism refers to theoretical perspective. Experimental and survey research refer to methodology whereas statistical analysis, sampling or interview represent methods of study. In the second column on the right, constructionism refers to epistemology and interpretivism refers to a theoretical perspective, whereas observation and interview represent methods of study.

With reference to objectivism, since the things of which the author wishes to have knowledge are regarded as real, having an independent existence and having intrinsic meaning, the researcher's role is to discover the meaning that already resides in them (Blaikie 2007). The knowledge that develops through a positivist lens is based on careful observation and measurement of the objective reality that exists "out there" in the world. Additionally, there are laws or theories that govern the world, and these need to be tested or verified and refined so that

we can understand the world. Thus, the accepted approach to research in the view of the positivist is that a researcher begins with a theory, collects data that either support or refute the theory, and then makes necessary revisions before additional tests are conducted (Creswell 2003: 7). In this study, the author employs a quasi-experimental and survey research design. The former allows cause-and-effect relationships to be established as her ultimate aim is to find out whether the variable (ER) is responsible for causing the events that she observes (reading improvement). The latter is characterized by a structured or systematic set of data called a variable by case data matrix (de Vaus 1986) in order to look at particular aspects of people's beliefs -- participants' attitudes toward ER. Due to the positivist position which holds that research is the process of making claims and then refining or abandoning some of them for other claims more strongly warranted, this study intends to test the theory of ER which claims positive effects on cognitive and affective domains of language learning.

With respect to constructionism, the interpretivist views the relationship which involves aspects of the social world such as languages as not being external and independent of our attempts to understand them. This approach understands reality as being constructed in and through our observations and pursuit of knowledge. In other words, reality is dependent on our attempts to know it, that it is a social construction and must be understood subjectively through the interaction of participants in the research process (Lynch 2003: 7). Thus, in this study, the author adopts a non-experimental design by using an interview with the program participants and observations of program events in data-gathering and analysis with the goals of program evaluation. The author uses the interpretivist

paradigm which sees the program as a socially interpreted and constructed reality, one that the evaluator must directly engage with in order to understand (Ibid).

### **3.3 Aims and Objectives of the Study**

The overall aim of the research project is to undertake an empirical investigation of ER in the English as a foreign language (EFL) context in Thailand. From findings reached in this study, pedagogical implications will be drawn for promoting EFL Thai students' awareness and augmenting their English reading.

#### **Objectives of the study**

The study aims to examine the feasibility of using ER as a supplement to regular English classes. The objectives are:

- To contribute to the body of knowledge in ER by providing insight into ER in the Thai EFL context
- To investigate the effectiveness of ER on students' reading comprehension, reading fluency and attitudes towards ER
- To utilize multiple assessments of reading comprehension



### **3.4 Research Questions**

Based on the two reading areas and attitudes of the students exposed to ER, the study addresses three research questions connected with ER and traditional instruction in classes taken by EFL Thai students:

*RQ1:* Will EFL Thai students who participate in ER groups and the control groups differ in post-test scores on reading comprehension as measured by two test tasks: written recall protocol and translation?

*RQ 2:* Will EFL Thai students who participate in ER groups and the control groups differ in scores on reading fluency as measured by a multiple-choice test?

*RQ3:* Will EFL Thai students who participate in ER groups hold a positive attitude toward ER as investigated by a questionnaire as well as an interview?

### **3.5 Research Hypotheses**

The following hypotheses relating to the foregoing objectives are:

- 1) There is no significant difference in the reading comprehension scores of students exposed to ER as compared with the scores of those taught by traditional instruction.
- 2) There is no significant difference in the reading fluency scores of students exposed to ER as compared with the scores of those taught by traditional instruction.
- 3) Students have a positive attitude toward ER after being exposed to ER.

### **Rationale of the Null Hypothesis**

Scientific statements can be divided into testable hypotheses. The hypothesis or prediction that comes from our theory is usually saying that an effect will be present. This hypothesis is called the *alternative hypothesis* and is denoted by  $H_1$ . (It is also sometimes called *experimental hypothesis*). Another type of hypothesis is called *null hypothesis* and is denoted by  $H_0$ . This hypothesis is the opposite of the alternative hypothesis and so would usually state an effect is absent. The reason that we need the null hypothesis is because we cannot prove the experimental hypothesis using statistics, but we can reject the null hypothesis. If our data give us confidence to reject the null hypothesis then this provides support for our experimental hypothesis. However, even if we can reject the null hypothesis, this does not prove the experimental hypothesis – it merely supports it (Field 2009: 27).

### **One-Tailed Test and Two-Tailed Test**

Hypotheses can be directional or non-directional. A one-tailed test (reflecting a directional hypothesis) posits a difference in a particular direction, such as when we hypothesize that Group 1 will score higher than Group 2. A two-tailed test (reflecting a non-directional hypothesis) posits a difference but in no particular direction. The importance of this distinction begins when we test different types of hypotheses (one-and two-tailed) and establish probability levels for rejecting or not rejecting the null hypothesis (Salkind 2010: 198).

### **3.6 Variables**

The variables used in this study are organized under the sub-headings “independent variables” and “dependent variables”. This distinction is key to experimental research, which focuses on testing how the independent variable affects (or causes a change) in the dependent variable. In the present context, specific research questions are posed in terms of whether particular ‘independent’ variables (i.e. ER) would cause change in measures of ‘dependent’ variables (i.e. reading comprehension, fluency and attitudes). The following two sections describe the variables used in the study.

#### **Independent Variables**

The independent variables contain two main student groups with two treatments: Extensive reading (ER) groups and the control groups (without ER).

#### **Dependent Variables**

The dependent variables consist of

- (a) the scores of the reading comprehension,
- (b) the scores of the reading fluency and
- (c) the scores of attitude survey.

Students are tested and given scores for reading comprehension, reading fluency and attitudes, which are measured using the instruments below.

1. Reading comprehension is measured using pre- and post-test of written recall protocol and translation.
2. Reading fluency is measured using multiple-choice questions (MCQ).
3. Attitude is measured using a seven-scale questionnaire.

These will be discussed in section 3.7.5 Instruments.

### **3.7 Methodology**

Since epistemological positions inform theoretical perspectives and these perspectives inform the methodology and methods of the research (see Figure 1), the present study employs the mixed method research approach which involves the mixing of quantitative and qualitative research methods or paradigm characteristics (Johnson and Christensen 2004). This method is based on the situationalist perspective that each method has usefulness in a specific situation or phase of the research process (Rossman and Wilson 1985: 631). In this study the two approaches are not accorded equal weight. The researcher relies primarily on a quasi-experimental research design which is associated with the quantitative research tradition, and buttresses the findings of a questionnaire survey with follow-up interviews which is associated with the other tradition -- qualitative. Two main rationales for combining methods are: (a) to achieve a fuller understanding of a target phenomenon and (b) to verify one set of findings against the other (Dörnyei 2007: 164) given that a combination of quantitative data (i.e., quantifiable data) and qualitative data (i.e., text or images) provides a better understanding of a research problem than either quantitative or qualitative data by itself (Creswell 2008:61-62).

This research develops a classroom-based and quasi-experimental technique. Data is collected to test a pre-stated theory and a triangulated approach is employed which is based on the idea of using two or three different methods to explore the same subject (Davies 2007).

### **3.7.1 Research Design**

This research employs a classroom-based, quasi-experimental design (Cook and Campbell 1979). It is based on the comparison of groups: quasi-experimental comparison and double-control group matching design. This means a design in which experimental research is conducted in situations which cannot be completely controlled or manipulated and one group receives a treatment while the other, representing the same population as the experimental subjects, does not receive a treatment. In the design using control groups, the comparison will be of the treatment effect between two or more groups. The chief objective of the control group is to quantify the impact of extraneous variables. It helps to ascertain the impact of the intervention only. The control-group design helps the researcher to quantify the impact that can be attributed to extraneous variables; however, it does not separate out other effects that may be due to the research instrument and a respondent. To separate out these effects, a double-control design is required (Kumar 1999). Implicit in the use of control groups is the important assumption that the control group represents the same population as the experimental group: it is as if we are comparing the same individuals with and without treatment (Selinger and Shohamy 1990: 137-141). The use of comparison between two 'experimental groups' (ER) and a 'control group' is a regular feature of study showing the causal force of treatments -- the exposure to ER. To the extent that the control and experimental groups are alike before treatment, and only the experimental groups are treated, if they differ after treatment the difference must logically be attributable to the treatment (ER). The measurement for the four groups will be identical before the treatment, but the real interest is in the difference between pre-test and post-test measurement (Sapsford and Jupp

2006). To increase the comparability of the groups since the subjects cannot be randomly assigned, the subjects in the four groups are matched for their characteristics (Selinger and Shohamy 1990) into three level of English learning ability: good, moderate and weak from the previous English 1 grade as well as the proficiency test prior to the start of the experiment.

This project employs a double-control design which has two control groups instead of one and excludes one of the control groups from the pre-test. The double-control design aims to separate out the effects caused by the instrument known as *the reactive effect*-- the effects caused by the instrument, which means the instrument itself educates the respondent. Another effect, *the maturation or regression effect* is an effect that may occur when using a research instrument twice to gauge the attitude of a population toward an issue which is a possible shift in attitude between the two observations. Sometimes people who place themselves on the extreme positions of a measurement scale at the pre-test stage may shift towards the mean at the post stage. They might feel that they have been too negative or too positive at the pre-test stage. Therefore the expression of an attitude in response to a questionnaire or interview has caused them to alter their attitude at the time of the post-test. This effect may not occur in this study due to the use of a questionnaire merely in the post-test.

### 3.7.2 Samples

According to Hage and Harris (1994: 57), sampling is a science of finding out a lot from a little. A fundamental point of sampling is that the selection of people to study must reflect the population which is the aggregate of items, e.g. students or teachers from which the sample is to be drawn values accurately most of the time. There are three methods of sampling:

1) random/probability sampling, i.e. simple random sampling, stratified random sampling, and cluster sampling;

2) non-random/non-probability sampling or purposive sampling, i.e. quota sampling, accidental sampling or opportunity sampling, judgmental or purposive sampling and snowball sampling; and

3) mixed sampling, i.e. systematic sampling containing the characteristics of both random and non-random sampling.

This research employs a *purposive sampling* or non-random sampling. Samples are non-probability samples, drawn from purposive sampling since participants possess certain key characteristics related to the purpose of the investigation (Dörnyei 2007: 98-99).

The samples were 284 EFL undergraduates at Rajamangala Univeristy of Technology Thanyaburi (RMUTT) in Thailand. They were existing groups of students enrolled in English 2 (3 credits), a compulsory English course in the 2<sup>nd</sup> semester of the academic year 2008 (17 weeks). In this semester, there were approximately 3,000 students enrolled in 80 sections of English 2. The sections ranged in size from 40 to 50 students and met for one 3-hour period each week for

fifteen weeks excluding two weeks-- one for the midterm and one for the final examination. Two experimental groups were taught by the researcher while the other four control groups were taught by two teachers to control teacher variables (Selinger and Shohamy 1990) because the teaching performance of teachers can influence the students' learning outcome. Therefore, the two control groups (pre- & post-test) were taught by the same teacher and the other two (post-test only) were taught by the other teacher.

The design is symbolized and represented in Figure 3.2 as follows:

- E1 = experimental group1
- E2 = experimental group2
- C1a & C1b = control group1a & control group 1b
- C2a & C2b = control group2a & control group2b
- X = Treatment (ER)
- T1 = pre-test
- T2 = post-test
- = no treatment

Figure 3.2 Pre-test/post-test with nonrandomized double-control group design

Group	Pre-test	Treatment	Post-test
E1	T1	X	T2
E2	T1	X	T2
<i>Impact of the treatment</i>			
<hr/>			
C1a & C1b	T1	--	T2
C2a & C2b	--	--	T2
<i>Reactive effect</i>			

(Adapted from Kumar 1999: 93; Selinger and Shohamy 1990: 143)



### **3.7.3 Experimental Design in Detail**

The study utilizes the experimental design of concurrent controls and random assignment. For practical purposes, clusters of subject groups are chosen on the basis of the participants' English 1 grade. This study utilizes groups which already exist. This is most appealing for second language experiments conducted in school environments because it requires the least amount of disruption of school routines (Selinger and Shohamy 1990). The six subject groups were created by first setting up eligibility criteria and then randomly assigning to two experimental (ER) and four control groups in order to improve external validity (by comparing the findings from the study of the other control group). This means that the groups were assigned by chance (at random) to the experimental or the control groups. With random assignment, the occurrence of previous events has no value in predicting future events. In general, random selection together with random assignment is preferable (Fink 1998: 58). However, the multi-group design in this study is concerned with measures to standardize the groups being compared. The design is also internally valid, which can control many errors or biases that may affect the experiment, one of which is the method of 'selection' whose bias is minimized by having all of the classes been randomly assigned (Selinger and Shohamy 1990).

## **Ethical Issues**

With reference to a code of practice of the University of Salford (University of Salford 2009), prior to conducting the research, the proposal of the project requires ethical approval from the University Research Governance and Ethics Committee, since the research involves human subjects, so the subjects' rights and privacy must be respected. This formal process of Salford University-wide Governance and Ethical Approval for new research proposals was introduced in October 2002. The process takes place through the work of the Research Governance and Ethics Sub-Committee (RGEC) of the Research Committee as the researcher is a postgraduate research student, the RGEC deals with research proposals that are part of a higher degree by research. The approval of this research project by RGEC was confirmed on 01 August 2007 (see Appendix A1). A request for permission for conducting research at RMUTT was made (see Appendix A2) and official approval was obtained from RMUTT (see Appendix A3).

In this regard, at the outset of the experiment in both the pilot and the main study the subjects were told that their participation in this experimental study was entirely voluntary. There were three main different groups of participants and each group had to sign the consent form pertaining to their involvement before participating in the project including interviews, which are

- 1) informed consent to participate in the experimental groups  
(see Appendix A4)
- 2) informed consent to participate in the control groups (pre- & post-test )  
(see Appendix A5)
- 3) informed consent to participate in the control groups (post-test only)

(see Appendix A6)

4) informed consent for in-person interview (see Appendix A7).

The participants were informed verbally that collected data were strictly confidential. Their participation in the questionnaire survey and informal interview was anonymous.

### **3.7.4 Context of the Study**

English is a foreign language in Thailand. It is not used officially. Thai students study English in their classes and do not have much opportunity to use it outside the classroom, especially in everyday life in speaking, reading, writing, and listening. However, in 1999 the Thai government made English a required subject nationwide and promoted its use for international communication (McDonough and Chaikitmongkol 2007: 111). On the basis of government policy, English is a compulsory subject from elementary through tertiary levels in educational contexts. Wongsathorn et al (1996: 89) have pointed out that “about 99% of Thai students begin studying English at the elementary level of education. Thus, altogether Thai students have spent almost 12 years learning English before studying at the university level. English is also required for entry into the tertiary level of education. The communicative approach with an eclectic orientation is favoured at the various levels of education. National language policy in the past tended to lay great emphasis on the national language. Now, demands for the study of modern foreign languages have been increasing since the economic boom in 1980”.

Rajamangala University of Technology Thanyaburi (RMUTT), the researcher’s workplace, is a large government university situated in a suburb of

Bangkok, the capital of Thailand. It provides undergraduate and graduate levels of education. In the past, RMUTT was the main campus of Rajamangala Institute of Technology (RMUT) which was first established in 1975 and comprised 11 campuses in Bangkok and 24 regional campuses all over the country before the separation into 9 independent RMUT universities, e.g. RMUTK (Rajamangala University of Technology Krungtep), RMUTL (Rajamangala University of Technology Lanna), and RMUTI (Rajamangala University of Technology Isan). RMUTT has twelve faculties including Engineering, Business Administration, and Educational Industrial with approximately 25,000 students and 2,000 staff. Students are required to complete two integrated skills EFL courses, English 1 and English 2, which are English for General Purposes (EGP). Their basic need to learn English is to read for their studies and for future study or future employment.

This study, thus, aimed to perform the research experiment with the RMUTT students studying English 2 in the second semester of the academic year 2008 for the following reasons.

- a) English 2 is a compulsory subject for the every undergraduate program and is a prerequisite course: that is, students must pass English 1 before being enrolled this module.
- b) English 2 is a general English course (EGP: English for General Purposes), which is important as a fundamental subject since English 2 is a compulsory module and a prerequisite module for the other two compulsory English modules in bachelor's degree programmes.

- c) The second semester is appropriate in that the students are accustomed to the university life and there are fewer freshmen activities compared with the first semester.
- d) The English 2 course book, Interchange 3<sup>rd</sup> Edition, continues from the previous 7 units, Unit 1 to Unit 7 (English 1) to Unit 8 to Unit 16 in the same book. This benefits the present study because the participants have already got used to the format of the book and the test types, midterm and final exam, organized by the Department of Languages, Faculty of Liberal Arts, RMUTT.
- e) English 2 students in the second semester are the majority of English 2 students. This is the highest English 2 population among the three semesters of the academic year.

### **Limitations of Classroom Research**

- *Number and selection of the subjects*

The subjects were initially 285 undergraduates at RMUTT in Thailand. They were drawn from a purposive sample of 2,840 undergraduates taking an English 2 module at the university. All of them were native speakers of Thai aged 19-22 and their English proficiency was at intermediate level. Some limitations emerge from this sampling in relation to sample size and language proficiency.

The sample size in this study is rather small, although the researcher made an attempt to control this variable at the outset of the experiment. Out of the 285 who were participated in the study, only 193 could be considered for statistical analysis of reading fluency, and 158 for reading comprehension because some of the participants dropped the class before the end of the semester and participants

who missed either the pre-test, post-test or the 12-timed tests were excluded from the study. Thus the study is limited to the number of subjects at RMUTT which could well represent the population of one of the higher education institutions in Thailand. If the number of subjects were increased, it might be possible to decide whether the findings were more generalisable. In order to achieve generalization, future research needs to be larger scale.

### **3.7.5 Instruments**

There are six instruments in the study.

- (1) teaching materials: Interchange 3<sup>rd</sup> edition, an English 2 course book
- (2) treatment materials: graded readers
- (3) reading comprehension tests: written recall and translation
- (4) reading fluency tests: 15 passages (8 items of 5 multiple-choice questions)
- (5) a survey questionnaire on attitude
- (6) an in-depth interview

#### **1) Teaching Materials: Interchange 3<sup>rd</sup> Edition**

Interchange Third Edition (Richards et al. 3<sup>rd</sup> edition 2005, Cambridge University Press) has been used as a student's course book of English 1 and English 2 since 2006. It was selected by the teachers in the Department of Languages, RMUTT. The book is intended for classroom use and contains 16 units which match the syllabus of both courses -- English for General Purposes. It integrates speaking, grammar, vocabulary, pronunciation, listening, reading, and writing. Unit 1 to Unit 8 is for English 1 while Unit 9 to Unit 16 is for English 2 (see Appendix L).

## **2) Treatment Materials: Graded Readers**

Graded readers, the materials used in the experiment are simplified short story books written within a limited vocabulary and are in common use in second language and foreign language teaching (Wodinsky and Nation 1988: 155). They had been selected on the basis of containing vocabulary items and grammatical structures appropriate for the pleasure reading competence of the subjects. Since this research is the first attempt to introduce and adopt an ER programme at RMUTT, the graded readers were funded by RMUTT. The researcher also used her own readers and collected some from her supervisors. The total number of the books is 679 graded readers from four publishers, Cambridge English Readers, Macmillan Readers, Oxford Bookworms Library, and Penguin Readers, together with 10 books from the British Medical Association (see Appendix B). From Simensen's (1987) research results of a study of publishers' policy on text adaptation and the main principles of text adaptation, Longman and Heinemann two publishers out of six to have guidelines about control of features of discourse. That is, both Heinemann and Longman are concerned with the organization of information in text (Simensen 1987: 53). Prior to the selection of the graded readers, the English 2 course book, Interchange 2 (Richards et al (2003), was examined in order to gain an overview of the current level of the English proficiency of the subjects, which is the intermediate level. The readers selected were based mostly on this level, the interestingness and the availability of the books. For example, Penguin Readers, ones of the selections are designed in association with Longman. They are published at seven levels from Easystarts (200 words) to Advanced (3000 words). The stories of the Penguin Readers are divided into three groups: contemporary, classics and originals. The language

used in each reader is either British English or American English. At the back of the book, these three pieces of information are provided as a guideline for the selection of the books. This was also determined by a pilot test of some stories with a similar group of RMUTT students. The pilot test revealed that one book can be read in one week by first and second year university students.

The books were carried to each class and students exchange and choose the books during class time with the help of volunteer students. Neither classes of participants was required to submit a written task such as a written summary of the books in Thai or write a summary in English. The only requirement was that they keep a record of their reading throughout the treatment. The procedure of the ER and the activities used in the study was similar to that of the pilot study which will be presented in the subsequent section.

### **3) Reading Comprehension Tests**

These will be discussed in the subsequent section on Test materials.

### **4) Reading Fluency Tests**

There are 15 reading texts (approximately 200 words in each text) with 8 multiple-choice questions (MCQ) and 5 alternatives (1 correct answer, 3 distracters, and 1 I don't know) for reading fluency assessment during a 15-week period for the study. Further details are described in the section on Test materials.

### **5) A Survey Questionnaire on Attitude**

An attitude survey questionnaire toward ER was administered at the end of the experiment, using a 7-point Likert scale and a ranking scale was analyzed by using percentages.



## **6) An In-Depth Interview**

This was conducted at the end of the experiment as a supplementary to the attitude questionnaire.

### **3.7.6 Test Materials**

There are several concerns in relation to the materials used to measure reading comprehension, which will be discussed in the following.

#### **How to Measure the Comprehension Difficulty of a Text for a Particular Group of Students**

Due to the three prime purposes of this study which aim to investigate the effects of extensive reading on students' reading comprehension, reading fluency and attitude toward extensive reading, it is necessary to carefully select or devise the test texts in order to measure the reading comprehension on the basis of 1) the interest of the texts, which is the main focus of extensive reading approach to encourage students to read, 2) the suitability of content, and 3) readability, that is the texts should be at the right level of difficulty for the subject students. This section will focus on readability or linguistic difficulty.

Readability is the combination of structural and lexical (i.e. vocabulary) difficulty (Nuttall 1987: 24). The history of readability measurement begins with an intense concentration of research on *Readability Formulas* in which several quantitative variables were combined in order to arrive at an estimate of the difficulty of the materials (Laroche 1979: 131). To date, there have been many instruments for over eighty years. Klare (1963) reports on 29 formulas between 1923 and 1959.

According to Schulz (1981: 45), many factors interact to determine the comprehensibility of a text. For example, in 1935 Gray and Leary conducted an extensive study, computing correlation between forty potential elements of linguistic difficulty and comprehension. They also investigated factors of visual appeal, formats, organization, stylistic elements, and subject matter and their influence on readability. Klare, as mentioned above, reviewing research on readability, listed 482 references in his 1963 publication. In 1975 he added 131 references and twenty-six formulas or devices for measuring readability in English and selected foreign language. Though there are a number of studies attempting to measure textual materials for reading difficulty, the readability of a text can be measured in three ways: 1) instructor judgment; 2) comprehension testing by cloze procedure; and 3) statistical readability formulas based on some types of linguistic element. Details of each are described in the following.

#### 1. Instructor judgment

Langer et al (1974, cited in Schulz 1981) proposed a system using a five-point semantic differential scale. Four main textual “dimensions” are presented for evaluation, with each containing sub-categories. The principal text qualities to be judged are

- text simplicity in terms of short, simple sentences, and use of common words,
- visible external organizational structure and logical internal sequence of text,
- length of text and concentration, and conciseness of essential information, and

- presence of special “interest stimulators” within the text such as exclamations, direct speech, rhetorical questions, direct address of reader, etc.

Although the authors claim that their system gives a more complete indication of readability than do readability formulas, they admit that the device depends basically on the subjective judgment of evaluators with some training and as a result, interrater reliability is very high.

## 2. Cloze procedure testing

The cloze procedure, which is frequently used as a test of reading comprehension (Shanahan et al. 1982) and general language proficiency (Lange & Clausing 1981, Schulz 1981), was first used by Ebbinghaus (1897 cited in Lange & Clausing 1981) and originated as a test of readability (Taylor 1953). Moreover, it has been used to measure readability in a number of languages (Klare 1974-1975: 95). To measure readability by cloze procedure, the two most common ways of deleting items from a text in preparing it as a cloze test are the random deletion of words within the entire text and the deletion of every *n*th word, *n* being between five and ten (Carroll et al 1959, Lange & Clausing 1981, Schulz 1981) this being replaced by a blank of some standard length. As to the number of items needed in a cloze test, Rankin and Bormuth (1967) seem to agree that fifty deletions are an optimal number. No deletions are made in several initial and final sentences, so that the test takers can get some ideas of the topic. Students are asked to fill in the blank spaces with appropriate words derived from their reading of the remaining context of the passage. The test will be administered to a randomly selected sample, the percentage of correctly completed spaces constituting the readability score for the population under consideration (Lange &

Clausing 1981, Schulz 1981). Another type of cloze procedure in rating the difficulty of a passage is to delete every fifth word in it. The score is the mean number of words correctly restituted by the subjects (Bormuth 1968, Nuttall 1987). Following are two studies which provide scores for interpreting difficulty levels based on cloze scores.

The great advantage of the cloze method is its synthetic approach as well as its simplicity for administration and scoring (Laroche 1979: 131). According to the cloze test supporters, none of this detracts from the validity of the instrument, for, at a time when theories of style and syntax are far from definitely established “hidden in the correct response is an understanding of the author’s style and technique” (Burmeister 1974: 47, cited in Laroche 1979). Another advantage that proponents of the cloze measure argue for is that it is a superior test of test readability because it approaches comprehension of meaning and pattern relationships directly through the reader, rather than indirectly through the counting of linguistic elements as in the case of statistical readability devices (Schulz 1981).

One disadvantage of the cloze procedure is that it cannot *predict* readability since at least the sample of the population in question has to read the text before its difficulty level can be established. Another factor might make cloze procedure inappropriate for determining readability – if the test designers deal with students whose major purpose for language study is attaining reading comprehension, rather than overall language proficiency. A cloze test is not a test of reading comprehension. It measures not just recognition and contextual inference; it tests active recall and language production – which are not absolutely necessary for meaningful reading (Schulz 1981: 46).

### 3. Statistical readability devices

According to Schulz (1981), research indicates that two major factors affect the linguistic difficulty of a written text:

- a) *syntactic complexity* measured in terms of average sentence length in words, letters, or syllables; number of clauses per words, etc;
- b) *word difficulty* measured in terms of average word length in syllables or letters, percentage of one-syllable words, number of “hard words” – i.e., words of three or more syllables – number of affixes, or percentage of words not appearing in word frequency counts.

Three of the most widely known statistical devices for measuring readability of English texts are the Flesch and Dale-Chall formulas and the Fry readability graph (Schulz (1981: 46). They are described as follows.

#### 1) The Flesch formula

In 1943, Rudolf Flesch published his first formula for the objective measurement of readability or comprehension difficulty of written materials, using the original McCall-Crabbs Lessons as a criterion (Klare 1974-1975). It has received widespread attention in many areas of communication and has been applied in a wide variety of fields; for example journalism, advertising, industrial communications, government publications, bulletins and leaflets for farmers, materials for adult education and children’s books (Flesch 1948, Hayes et al 1949, Klare 1974-1975). The formula was based on counting average sentence length in words and average word length in syllables (number of syllables per 100 words) to arrive at a “reading ease” score (Schulz 1981). The scoring system ranges from 0 (“very easy”) to 7 (“very difficult”) (Flesch 1948). The formula for predicting “reading ease” is:  $RE = 206.835 - .846wl - 1.015sl$ . The formula for predicting

“human interest” is:  $HI = 3.635pw + .314ps$ . Scores computed from both formulas have a range from 0-100, indicating materials from very difficult to very easy. Flesch (1950) also maintains that the “reading ease” formula is not just a measure of sentence complexity, but also an indirect measure of level of abstraction which is a basic element in readability (comprehension difficulty) since word complexity and sentence length are an indirect measure of that factor (Schulz 1981). In addition, in order to facilitate the use of these formulas, Farr and Jenkins (1949) calculated and tabled the values for them, namely “Flesch Reading Ease Index Table” and “Flesch Human Interest Index table”.

## 2) The Dale-Chall formula

Dale and Chall presented their formula for adult materials in 1948; it quickly became, along with Flesch’s Reading Ease formula, one of the two most widely used. It was designed –as Flesch’s revision had been -- to correct certain shortcomings in the original Flesch formula. Like Flesch’s test, it uses the 1925 McCall-Crabbs *Standard Test Lessons in Reading* as a criterion (Klare 1974-1975: 70). It also utilizes the number of words per sentence, but instead of average word length it measures the number of words not appearing on listings of high frequency vocabulary (Schulz 1981: 47).

## 3) The Fry readability graph

Fry proposed a “readability graph” in 1965 for predicting readability, recommending it as a way of saving the user’s time and effort. It first appeared in his book *Teaching Faster Reading: A Manual*, published in England (Fry 1965) and later in American publications (Fry 1968a, 1968b, 1969; Gaver, 1969, Nuttall 1987). It was specifically for use with ESL texts (Nuttall 1987:27). It permits the classification of reading materials into difficulty levels for instructional grade

levels one through seventeen. It is based on the number of syllables and the average number of sentences in a 100-word passage (Schulz 1981). The user simply enters the counts of the syllables and words in a graph and reads the readability grade score directly from it. Fry's graph has been validated on both primary and secondary materials, and the scores derived from it correlate highly with those from several well-known formulas (Klare 1974-1975: 77).

With respect to the selection of the reading passages used as test texts to assess students' reading comprehension and reading fluency, the present study considers learners' interest and the suitability of the content, readability (i.e. complexity) and text length suitable for learner level as well as authenticity. The texts that are chosen introduce students to new and relevant ideas, make them think about things they have not thought before and also help them to understand the way other people feel or think, e.g. people from different backgrounds, problems or attitudes from their own (Nuttall 1987: 30). According to the perceived difficulty and density of expected unknown words, the texts will be rated by English instructors who teach English courses at RMUTT where the study participants are selected.

Apart from the instructors' approval of these texts based on their intuitions, a critical analysis of the readings is performed and calculated to obtain a precise depiction of text difficulty. This study which needs an objective assessment of the readability of a text utilizes the Flesch readability formula for analyzing the English language texts. The reason for using this formula is discussed in section 3.7.7 Readability of the Test Texts.

However, a statistical readability measure is not the sole criterion on which to select the text as mentioned earlier. In addition to assessing linguistic

complexity, this study also takes into account the plots and content of the texts and makes a subjective judgment regarding the length and organization of the text, the content appeal, and special stylistic components used by the author which could invalidate the readability measure obtained by element counting as suggested by Schultz (1981: 52). In addition to the above mentioned, from the pilot study the researcher obtained a fairly accurate and useful indicator of comprehension difficulty based on interviews with the students who had taken the tests and discussion with other English teachers in the Department of Languages at RMUTT.

### **Reading Comprehension: Test Texts**

One of the several critically important aspects of this study is the choice of reading passages. These passages need to pose a reasonable challenge to the subjects (Zaki and Ellis 1999). Criteria for the selection of test texts include the following:

- Text length suitable for learner level or time restrictions
- Complexity or readability suitable for learner level
- Learners' interest in topic
- Authentic texts
- Topics of texts being general or without cultural bias

This study uses multiple passages drawn from ESL source materials at the appropriate level of the subjects and from one type of writing, i.e. narrative. The texts are selected on the basis of their presumed interest and readability by subjects, all of which are narrative due to the nature of the treatment that requires the subjects to read graded readers being narrative. A number of studies have



found that narrative texts arouse greater interest than expository texts (Tobias 1995:399). For example, Fernald's (1987) study reported that more than 80% of the students rated chapters in psychology textbooks prepared in a narrative form as more enjoyable and more conducive to learning than chapters of similar length written in an expository format. Hidi, Baird, and Hildyard (1982) asked adult raters to make sentence-by-sentence evaluations of both the importance of and their interest in expository, narrative, and mixed school texts. They found few differences among the texts in ideas rated as important; however, 36.5% of the sentences in narrative texts were rated as interesting, as compared with 30.5% in mixed texts and only 2.5% in expository texts. There were few immediate recall differences among the texts, but on delayed recall seventh graders remembered over twice as many important units from narrative as compared with mixed texts, with expository texts in a median position.

Regarding reading comprehension tests, most of the research on reading comprehension required participants to read only one text as part of the experiment. The problem with this approach is that it hinders the reliability of the results. That is results may be skewed by the characteristics of the particular text used in the experiment. This research attempts to control for text type as an intervening variable by employing more than one text. Thus, the pre- and post-test of reading comprehension consist of three texts and an accompanying set of tasks based on these texts. The texts and their accompanying tasks are identical for the pre- and post-test. The three texts, namely Anger, A Sad, Sad Story, and Lucy and the Chickens represent the same genre: narrative, containing 292, 434, and 686 words, respectively.

### Description of the Test Texts for Reading Comprehension

The texts and their accompanying tasks are identical in both the pre- and post-test. The three texts on the pre- and post-test represent the same text genre, narrative, which is typical of the type that students encounter in their daily life and is neither highly technical nor dependent on previous knowledge.

The central characteristics of the three texts are summarized in Table 3.1.

Table 3.1 Profiles of texts on reading comprehension test

Text	No. of Words	No. of Sentences
1 Anger	292 words	30
2 A Sad, Sad Story	434 words	47
3 Lucy and the Chickens	686 words	82

- The first text, Anger, is the story of a wife waiting for her husband to have dinner at home together but he was late. The story is narrated by the writer.
- The second text, A Sad, Sad Story, is the story of a little man who liked eating out and cheated people out of paying for his meals. It is narrated by the writer.
- The third text, Lucy and the Chickens, is the story of a little girl who loved and took care of her animals with good will.

As mentioned above, the criteria for the selection of texts used in the present study consider both complexity (i.e., readability or the choice of vocabulary and syntactic complexity) and text length suitable for learner level, as

well as authenticity and learners' interest in the topic. The three texts are deemed appropriate for use in the study according to perceived difficulty and density of expected unknown words, as rated by six instructors who teach the English 1 and English 2 courses from which the study participants are selected as well as the results of the pilot study and interviews with the students who have taken the tests. Even so, despite instructors' approval of these texts based on their intuitions, a closer analysis of the readings reveals a more precise depiction of text difficulty through using the Flesch formula to measure the readability of the test texts.

### **3.7.7 Readability of the Test Texts**

All texts used in the tests were examined critically for their comprehension difficulty for the learners in the study. The researcher attempted to select interesting narrative texts which permit comprehension by individuals with limited language proficiency. The linguistic difficulty of a written text is affected by two major factors as Schulz (1981: 46) states. The research indicates that one is *syntactic complexity* (measured in terms of average sentence length in words, letters, or syllables; numbers of clauses per words, etc.); the second is *word difficulty* (measured in terms of average word length in syllabus or letters, percentage of one-syllable words, number of "hard words"—i.e., words of three or more syllables –numbers of affixes, or percentage of words not appearing in word frequency counts).

This study measures the readability of the test texts by the Flesch formula which as noted is one of the best known readability measures of English texts (Harrison 1984), the other measures being Dale-Chall and the Fry Readability Graph. The reasons for using this formula is that because Flesch was primarily interested in assessing adult reading material, he chose a difficulty index which

did not relate to grades, but to a notional comprehension score out of 100. Thus a difficult passage would yield a score of below 50, while a simple child's book would approach a score of 100. This is the Flesch formula used in this study:

$$\text{Reading ease score} = (1.015 \times \text{WDS/SEN})$$

where  $\text{WDS/SEN}$  = average number of words per sentence

The readability of the texts used in the study was verified by comparing the results of the Flesch to those of the Lix (*Lesbarkeitsindex*) device which was another formula due to the claims (Schulz 1981) that Lix device can be used for any particular languages based on the research study of Björnsson (1968). The findings revealed that the Lix device does not differentiate text difficulty to the same extent as the Flesch formula. The Lix formula appears to overrate the difficulty of these English texts. Lix is illustrated below.

The Lix device measures the sum of average sentence length and per cent of "long words" (a word with more than six letters) according to the following formula:

$$\text{Lix} = \frac{\text{number of words}}{\text{number of sentences}} + \frac{\text{number of long words} \times 100}{\text{number of words}}$$

The following norms aid in interpreting the *Lix* result:

	20
Very easy text .....	25
	30
Easy text.....	35
	40
Average text.....	45
	50
Difficult text.....	55
	60
Very difficult text.....	65
	70

Figure 3.3 Lix readability figures of the test texts used in the study

A	B	C	D	E	F	G	H	
Text	Words	Sentences	Wds/Sents	Words>6 char	Ex100	F/B	<i>Lix</i> = D+G	Meaning
1: Anger	292	30	9.73	40	400	1.37	23.43	-- very easy text
2: Sad	434	47	9.23	67	6700	15.44	24.67	-- very easy text
3: Lucy	686	82	19.00	128	12800	20.45	39.45	-- easy text

From an analysis of the readability of the three test texts above, it is found that two texts are very easy and characteristic of children's and youth literature (for ages 8-16) while the other is an easy text and is characteristic prose fiction for adults. These two levels are considered to be the appropriate readability level of the texts proposed to be used in a pilot study. The reason is that the test-text type is intended to be fiction or literature so as to correspond with the graded readers -- simplified short stories. Suppose that the analysis of readability of the test texts showed the to be average texts which represent informational non fiction texts, difficult text which represents technical texts and very difficult text, these test texts would not be suitable for the study and, thus would need to be substituted by new ones. However, it will be of benefit to have a greater range of text readabilities so that there is a gradation in task for students. In order to achieve this benefit, two more long texts will be added in the pilot tests.

### The Length of Test Texts

The length of texts to be read in the test tasks is also taken into account since more advanced learners are said to be able to handle longer texts than lower-level readers. The texts proposed for the tests will be both short texts and longer texts. This proposal is adopted from the research finding of Engineer (1977), showing that when texts longer than 1,000 words are used, the abilities that can be measured change. The suggestion is that longer texts allow testers to assess more study-related abilities and to reduce reliance on essential processing abilities that might tap syntactic and lexical knowledge more than discourse processing abilities. The test texts ranging from 292 to 845 words consist of two short texts and two longer texts. They aim to reflect the situation where the subjects have to read long texts-- graded readers as well as in their academic situation. (This use of longer texts is similar to that of IELTS which contrasts with TOEFL, where short passages are used.)

The reason for using three texts is that it allows a wider range of topics to be covered. In other words, it minimizes content bias.

Figure 3.4 The Flesch readability figures of the test texts used in the study

A	B	C	D	E	F
Text	Words	Sentences	WD/ SEN	Flesch Reading Ease Score	Meaning
1: Anger	98	11	9	58	Fairly difficult
2: Sad	96	12	8	61	Standard
3: Lucy	99	14	7	63	Standard

*Note:* In the Flesch formula, to test the readability of the text, in a 100-word sample, find the sentence that ends nearest to the 100-word mark—that might be at the 94<sup>th</sup> word or the 109<sup>th</sup> word. Count the sentences up to that point and divide the number of words in those sentences by the number of sentences. In counting sentences, follow the units of thought rather than the punctuation.

The findings from the Flesch test that was applied to assess the readability of the test texts in the study suggested fairly similar results to those of the pilot study including interviews with students and to those of the researcher's objective judgment based on experience in teaching EFL to Thai students for twenty-five years. That is due to the RMUTT students' reading ability in English and comments on the texts. Of the three texts, Text 1, Anger, is the most difficult but the shortest in length; Text 2, Sad, is moderate (not difficult) in both the level of difficulty and the length and Text 3, Lucy, is the easiest but the longest text. In short, the Flesch formula is an effective device which was applied to predict the readability of the texts along with the pilot study and the researcher's judgment.

As is the case with limiting research studies to the use of a single text, presenting finding based on one text type restricts the extent to which research results can be generalized to other reading environments.

Taking into account the preceding criteria for selecting texts to be used in extensive reading research, the present study attempts to incorporate the common factors. That is, both text length and complexity (i.e., readability) suitable for learner level are considered, as well as authenticity and learners' interest in the topic matter. In addition, based on these criteria, three reading passages were selected in response to the need for research involving multiple measures.

### Reading Fluency: Test texts

The test material for reading fluency is narrative materials comprising 15 texts. The criteria for the selection of the texts were the same as those of the reading comprehension as already explained. The readability of the texts was predicted by using the Flesch formula as displayed in the following Table 3.2. The reading ease scores of the overall texts represent 'standard' level based on the seven levels of scores ranging from every easy (100) to very difficult (0). The scale in the Flesch reading ease score comprises 'very easy', 'easy', 'fairly easy', 'standard', 'fairly difficult', 'difficult', and 'very difficult'. Consequently, these texts are neither easy nor difficult because they are in the middle of the scale.

Table 3.2 Profile of texts on reading fluency tests

Text	Words	Sentences	WD/SEN	<i>Flesch Reading Ease Score</i>	Meaning
1. Susan and Sam	202	24	8	61	Standard
2. Life in Rosebud	201	23	8	61	Standard
3. Susan and Sam's life and dreams	198	25	8	61	Standard
4. A visit to the doctor	198	27	7	63	Standard
5. Changes for Susan and Sam	201	25	8	61	Standard
6. An unhappy time	202	24	8	61	Standard
7. A phone call from Jane	200	23	8.69	60	Standard
8. A phone call from Ted	199	23	8.65	60	Standard
9. Jane arrives	201	24	8	61	Standard
10. An airline accident	203	26	8	61	Standard
11. Ted and Maria arrive	204	23	8.86	60	Standard
12. A day in New York	200	23	8.69	60	Standard
13. Two different jobs	198	23	8.60	60	Standard
14. Time for a vacation	197	25	8	61	Standard
15. At the airport	202	26	8	61	Standard



### **Rationale of Using Multiple Reading Comprehension Tests**

Alderson (2005: 203-206) affirms that there is no one 'best method' for testing reading. No single test can fulfill all the varied purposes for which the testers want to test and it is now generally accepted that it is inadequate to measure the understanding of a text by one method above. That is, objective methods can usefully be supplemented by more subjectively evaluated techniques. Good reading tests should employ a number of different techniques, possibly even on the same text, but certainly across the range of texts tested. This is reasonable since in real life reading, readers typically respond to texts in a variety of different ways. Techniques for measuring reading include cloze test, gap-filling test, multiple-choice techniques, written and oral recall, sentence completion, open-ended question, true/false, matching activity and checklist. Despite this well-known fact, many reading researchers continue to use only one task to measure reading comprehension. For example, Yano et al. (1994) assessed foreign language reading comprehension among 483 Japanese college students reading simplified versions and those reading elaborated versions by using 30 multiple-choice items; Schraw et al. (1995) tested the relationship among sources of interest, perceived interest, and text recall with 154 undergraduates from a large Midwestern university who read an 800-word passage by using two questionnaires to collect data on both sources of interests in relation to a written recall of the passage. Allen et al. (1988) examined the extent to which 1,695 secondary school students studying French, Spanish and German in the US were able to read authentic materials by administering four texts for each language and asking them to write recall protocols so as to measure their reading comprehension.

Owing to the effect of methods of testing on test score, results of certain studies show that the methods of testing, namely, the procedure used for collecting the data, the type of instrument, and the type of questions (multiple-choice versus open-ended) (Gordon 1987; Shohamy 1984; Shohamy, Reves and Bejerano 1986 cited in Shohamy 1994) affect scores obtained from language tests and genre (Shohamy and Inbar 1991). In other words, the nature of the reading comprehension test can affect reading comprehension results (Ko 2005: 133). Moreover, because research findings have shown that the method of assessing reading comprehension affects readers' performance on a test of reading comprehension (Shohamy 1984; Lee 1986; Wolf 1993), two different reading comprehension tasks are used in this study: written recall protocol and translation and multiple-choice test for measuring reading comprehension and fluency simultaneously. These are discussed immediately below.

### 3.8 Measures

There are four main measurement tools employed in the main study: 1) reading comprehension tests, 2) reading fluency tests, 3) a questionnaire and 4) an interview on attitudes toward ER. The pre-and post-tests are identical. They aim at measuring reading comprehension, whereas the reading fluency tests involve 15 passages and are grouped into a series of three timed reading tests. The last two tools, a questionnaire and an interview are used in the post-test only.

There are four kinds of measures in the main study.

- (1) three reading texts for both written recall protocol and translation tasks for reading comprehension assessment in pre- and post-test
- (2) fifteen reading texts (approximately 200 words each) with 8 multiple-choice questions (MCQ) and 5 alternatives (1 correct answer, 3 distracters, and 1 I don't know) for reading fluency assessment after 15 weeks
- (3) a questionnaire (13 items) for attitude measurement used at the end of the experimental study for participants in the ER programme
- (4) an interview of participants in the ER programme

The procedure for the reading comprehension tests using written recall protocol and translation tests are similar in those used after participants had finished reading the texts (no time limitation). The texts were removed and then the student wrote their answers on a separate answer sheet. All tests had no time limit in reading and answering the tests. Only the fluency tests were timed while participants were reading the texts by asking each participant to record their

starting time and finishing time on his/her text. Three digital clocks were provided in the classroom.

To test students' reading comprehension of the three texts, students wrote recall protocols which meant what they could remember from the reading, recalling the reading of the text just read, without turning back to the passage. Three different stories were distributed to students. The story used contained 292 - 686 words so there was as little demand as possible put on memory (Barnett 1986: 344). All of the tests were answered in Thai. These instruments were constructed on a basis of the principle that the test writer should specify as precisely as possible what he intends to assess and then find means of assessing it (Harrison 1993: 42). Details are described below.

### **1) Written Recall Tests**

Written recall tasks have been commonly used as a methodological tool for assessing readers' comprehension of a text (Barnett 1988; 1986; Bernhardt 1983; Brantmeier 2001; 2003; 2006; Carrell 1983; Lee 1986; Maxim 2002; Shraw et al. 1995; among others). They are based on the notion that text comprehension and recall are closely related in that what readers understand from texts, they can also recall (Bransford 1979 cited in Apple and Lantoff 1994: 439). Davis (1989) argues that either cloze test or target language protocols are less efficient measures compare to native language recall protocols (e.g. Johnson 1982) because those procedures might hinder the participants from expressing their understanding or revealing their thoughts precisely. In other words, the use of the students' native language in the recall protocols eliminates any interference from the students' productive language skills (Barnett 1986: 345) so students are able to provide the fullest account of their comprehension without being stopped

by their limited language competence (Lee 1986). In addition, Bernhardt (1991) claims that the free recall protocol does not influence the students' understanding of the text in any way. She contends that with multiple-choice or open-ended questions additional interaction exists between texts, reader, questioner, and between the questions.

According to research, a truer depiction of comprehension is disclosed when the readers use their native language in the comprehension assessment tasks (Bernhardt 1983; Brantmeier 2006; Maxim 2002 and Wolf 1993). All the assessment tasks in this study, thus, will be completed in the students' native language, that is 'Thai'.

One objection might be that this looks more like a test of memory than of understanding, but if the task follows immediately on the reading, as Nuttall (2005) stated, this should not be too much of a problem. In addition, the shorter length of the test texts would minimize the limitations of the recall test.

### **Scoring Method for Recall Test**

There are several different procedures for written recall protocols scoring. Meyer (1985) developed a system that identifies the structural characteristics and lexical units of a passage and arranges them hierarchically. The disadvantage of this system is that extensive time is needed both for devising the textual units' hierarchy and for scoring the recall protocols.

An alternative approach is the method first proposed by Johnson (1970: 13) in which a text is "divided ... into pause acceptability units ... Raters were told that the functions served by pausing might be to catch a breath, to give emphasis to the story, or to enhance meaning. The locations in the story which

were psychologically acceptable for pausing were thus hypothesized to be one of the functional boundaries used in encoding and decoding the narrative”.

Bransford and Johnson (1973: 393), defined these idea units as units that corresponded “either to individual sentences, basic semantic propositions, or phrases”. This definition of idea units has been widely cited and used in second language reading research to describe the scoring system applied to written recall protocols (e.g. Carrell 1985, 1992; Lee 1986; Lee and Riley 1990; Riley and Lee 1996).

A simpler approach was employed in Lee and Ballman’s (1987) study of reading comprehension by university students of Spanish. Learners’ recall of the total number of idea units in the text was compared to their recall of the important idea units. To achieve the latter measure, the researchers ranked the importance of idea units from the reading in terms of their overall importance to the structure of the passage. Importance in their study was defined as “the central idea(s) around which the passage was organized” Lee and Ballman (1987: 111). The results showed that in terms of the number of structurally important idea units recalled, the pattern that emerged was the same as that for the total recall of idea units. This suggests that for scoring recall protocols it may not be necessary to account for every idea unit in a reading passage. Researchers should focus on the most important idea units in a text, judged by independent raters.

In this study, therefore, main idea unit analysis was used to score the recall protocols i.e. the number of idea units in each recall protocol was established and counted. The method is similar to that of Plass et al (1998) in that two raters independently listed the number of main idea units or propositions of the text, identifying the central ideas and occurrences in the passage. For example, in Text

1 each rater originally came up with 12 propositions, agreeing on 10 of the 12, and through a discussion came through to a consensus about the 6<sup>th</sup> and 15<sup>th</sup> and 3 additional ones. Each recall protocol was then scored in terms of these 15 propositions: 1 point was awarded for each proposition that was mentioned, and the totals for each of the individual propositions were tallied with a maximum possible score for Text 1 being 15, Text 2 being 25, and Text 3 being 26.

### **Scoring Method for Recall Tests in the Main Study**

The scoring method for the recall test is holistic, using a single score with a scale rating from 0 to 10 (total of 10 scores). It is not scored ‘objectively’ as either right or wrong. It is scored ‘subjectively’. It represents the view that written texts have qualities that are greater than the analytic sum of their measurable parts (Lynch 2003: 53).

### **2) Multiple-Choice Question Tests (MCQ)**

This test is a multiple-choice version of the sentence completion test format, offering the students alternatives for each gap. In the multiple-choice test (hereafter referred to as ‘MCQ’), each item has only one correct answer and three distracters as choices alongside the items (questions). If the students choose the wrong answer, it may be due to lack of comprehension of the text or of the question. Given that the intention of this test is to assess the students’ understanding of what they read on their test sheet (the passages and the items), this test is designed to use the item form as a statement rather than a question, aiming for the items to demand as little effort in understanding as possible from the student.

The shortcomings of MCQ is that students can choose the right answer by eliminating wrong answers, which is a different skill from being able to choose the right answer in the first place (Weir, 1990, cited in Weir 1997). MCQ involves passage independence, which means that candidates can determine answers without reading the passage (Bernhardt, 1991) and in some cases the answer to one item may depend on the answer to another (Harrison 1993). Candidates can be trained in test taking techniques to do the MCQ (Weir, 1997). This means that the candidates may not be able to answer the questions correctly from their comprehension. Rather, they may exploit some techniques in test taking or guessing the answers.

In this study, each reading fluency passage consists of 8 multiple-choice items. They will be given to the students after the reading. Students are expected to choose a correct answer among five choices as mentioned before. Items are matched to all parts of the passage so that the test can check for overall understanding of the story (see Appendix D2: Sample of Reading Fluency Test).

### **Scoring Method of Multiple-Choice Question Tests (MCQ)**

The scoring method of MCQ is that for each item, an examiner assigns a '1' for a correct answer, a '-0.33' for an incorrect answer, and a '0' for an 'I don't know' answer in order to prevent students from guessing the answer (see Appendix D2-1).

### **3) Translation Tests**

Translation Tests were used in the main study as a replacement for the short answer questions. One reason is based on the results of the pilot study which revealed that the students were not able to understand the questions in the tests.



This is in line with Shohamy (1984) who suggests that questions set in L1 (first language) are easier than in TL (target language) and the latter may not give as accurate a measure of comprehension. In monolingual contexts it seems logical that candidates might be permitted to write their answers in their mother tongue as well as having the questions in L1.

Another reason concerns the written recall measures for assessing reading comprehension as already discussed above. Bernhardt (1991: 200-210) proposes immediate recall as an alternative to traditional testing measures, drawing on her experience in cognitive psychology and L1 reading research. However, Kobayashi (1995: 113) draws attention to the fact that readers may not be able to remember all they have understood. Consequently, translation tests were used to replace the SAQ in comprehension assessment in the main study. This is also based on the research by Chang (2006) comparing readers' performance on immediate recall and a translation task to explore the effect of memory on readers' recall. Ninety-seven English major university students in Taiwan participated in the study. Two expository texts were selected: *Dyslexia* (195 words) and *Telegraph* (173 words). The results showed that the translation task yielded significantly more evidence of comprehension than did the immediate recall task, which indicates that the requirement of memory in the recall task hinders test-takers' ability to demonstrate fully their comprehension of the reading passage.

### **Scoring Method of Translation Tests**

The scoring method of translation is '1' for a correct answer/sentence and '0' for an incorrect answer (total of 37 scores for text 1, 50 scores for text 2 and 78 for text 3).

#### **4) A Questionnaire on Attitudes toward ER**

The questionnaire was used in this study as one of the two research tools for data collection on attitude, the other being an interview. Questionnaires used are as a survey research technique and have derived considerable credibility from their widespread acceptance and use in academic institutions. They are considered an appropriate technique when enough general information is known or can conveniently be obtained about the subject matter under investigation (Hague and Harris 1994: 2). With respect to attitudes, Lado (1977: 387-388) recommends that “not necessarily requiring separate experiments but rather to be observed in almost any of the experiments are the attitudes that particular approaches encourage in the students”. Thus, the questionnaire is one of the important tools designed to gather information about students’ attitudes towards extensive reading. It is made up of closed questions (fixed responses) which require the respondent to choose between a limited numbers of answers (Hague 1998: 52-54). In other words, the questionnaire employs Likert scale. Attitudinal questions seek information about what the students think of ER, their image and rating of ER and why they do ER are posed.

This questionnaire was developed and administered in Thai after the researcher had surveyed studies in the fields of language learning and educational psychology. It was used in the pilot study and then revised and administered at the end of the treatment in order to investigate the students’ attitudes toward ER owing to a body of research suggesting that learners’ attitudes toward the learning situation affect their degree of success (Mueller and Miller, 1970; Gardner et al, 1986; Larsen-Freeman and Long 1991: 178-179). The questionnaire was revised

due to some ambiguity and redundancy which was found after interviewing the students.

### **5) An Interview on Attitude toward ER**

The interview used a structured-interview format as a guideline with a mixture of questions with predefined answers as well as those where the respondent was free to say whatever they liked. One advantage of an interview over a questionnaire is that interaction with the students can improve the chances that the information elicited is accurate and complete (Gradman and Hanania 1991). The purpose of the interview is to ask the informants to clarify questions of attitudes (Færch and Haastrup, 1984) and to learn more about their attitudes toward reading English extensively. A 15-30 minute interview was carried out with 58 individual volunteer participants, outside the classroom at the end of the ER programme.

### **Testing Procedures**

1. In the first 2 days of the first weeks of instruction, two kinds of classes -- experimental groups and control groups, did the pretest. The students were directed to read all the instructions before beginning and take as much time as they needed because afterward they would be asked to recall as much as they could, from general ideas to details.

2. Once they had read the texts, they had to turn the texts in and collect two sheets of paper. Students write their names on the paper. On the first paper, the students write down their answer in Thai, that is what they can remember, without worrying about complete sentences or textual organization. This step was

used to reduce memory limitations. (The students were instructed to organize their recall in Thai.)

3. After the recall task, the students took a second reading comprehension test about the texts.

### **3.9 Pilot Study**

Through a pilot study the researcher can minimize variables, identify unexpected problems and judge the feasibility of the overall research plans and then make modifications as necessary such as changing inappropriate strategies to the more effective and feasible ones.

The following subsequent sections present the report of the pilot study.

- **Data Collection**

#### **1) Instruments used to assess reading comprehension in pre- and post-test**

- 1) written recall protocols
- 2) short answer questions (SAQ)

The pre- and post-test are similar due to the difficulty of constructing an identical version of a test. From a language point of view there seems to be no safe way in which we can be sure that one test is equivalent to another (Davies 1990: 22).

## 2) Instruments used to assess attitudes to ER in the post-test only

1) a questionnaire

2) an interview

- **Experiment Design**

This pilot initially involved 6 groups of participants enrolled in the English 2 class. Of these, three groups came from classes taught by the same teacher; the other half came from the classes taught by another teacher at the Department of Languages, Faculty of Liberal Arts. In the second week of the pilot, there were only three groups for the researcher to teach. This is because after selecting 6 groups out of 88 existing groups of English 2 based on the students' English 1 grade (average of D and D+); the teacher of the three selected groups changed her mind and withdrew from the study. Another reason is that due to time constraints and the students' assignments, the tests prepared were unable to be administered to the other two groups as a post-test. However, it was possible to use them in addition to a try out of the tests for reliability and validity.

Figure 3.5 One-group pre-test & post-test design (a within-subjects design)

Group	Pre-test	Experiment	Post-test
E	T1	X	T2

E = Experimental group

T1 = Pre-test

X = Treatment

T2 = Post-test

Once the same group of participants was tested, in order to avoid the result due to practice and fatigue, counterbalancing was introduced such that one half of the group received Text 1 followed by Text 2 and the other half received Text 2 followed by Text 1.

- **Method of the Pilot Study**

- **Design**

A mixed design was used in this study. The quantitative aspect of the design consisted of repeated measures, one-group pre-test & post-test design that was used to evaluate the effect of ER on students' reading comprehension. Students had taken a reading comprehension pre-test before they selected one graded reader each week to read out of class, at least one reader per week for two weeks and wrote a summary of the book in Thai. On the fourth week, students took a post-test which was identical to the pre-test. This design allows for the examination of the effect of ER during a single time period. The pre-test and post-test design allows the researcher to determine the immediate effect of treatment of which the pre-test is to establish learners' initial level of ability and post-test to measure learning (Mackey and Gass, 2005). Another aspect of the design involved the completion of an attitude questionnaire using a 7-point Likert scale and a ranking scale.

- **Setting and Sample**

The purposive sample consisted of 27 first-year students aged 19-21 years. Of these, five were male and twenty-two were female. The students majored in Educational Technology, Faculty of Technical Education. They were an existing group enrolled in English 2 in which the study was conducted. This module is a compulsory course for which 80 percent attendance is required. Participants were

recruited based on their English 1 grade which was C and C+ on average comparable to band 4.5 of IELTS and particularly with the cooperation of the teacher of this group who was willing to participate in the study. Students participated in the study as a regular class activity; thus they were in a real learning situation in an intact class setting, being asked to learn from graded readers, at least one reader per week. The mode of students' English 1 grade was D (9 students) and D+ (5 students), C (8 students), C+ (7 students) [grade A = 4.0 (=, >80 marks), B+ = 3.5 (75-79 marks), B = 3.0 (70-74 marks), C+ = 2.5 (65-69 marks), C = 2 (60-64 marks), D+ = 1.5 (55-59 marks), D = 1.0 (50-54 marks), and F = 0 (=, < 49 marks)]. No participant dropped out of the study. All students took the same test. The majority (60%) had studied English for thirteen to fifteen years and eighty-five percent had never learned English through ER. Nine percent of the sample (two students) had experience of ER for two years. These participants were not included in the final results due to contamination. Thus, the total number of participants was twenty-five.

- **Instruments**

Four kinds of instruments were used: teaching materials, treatment materials (graded readers), testing materials and a survey questionnaire.

Three kinds of measures were employed: recall protocol, short answer questions and a questionnaire.

- 1) Teaching Material**

The material used in normal teaching of English 2 module is a course book, *Interchange 3<sup>rd</sup> ed.* (Richards et al. 2005). It is intermediate level for bachelor's degree students.

## **2) Treatment Materials**

679 graded readers from several publishers, Penguin Readers, Bookworm Library, Oxford University Press, Longman, Cambridge University Press and Cambridge English Readers, were used to allow students to choose with guidance from the researcher on the level of difficulty and interest for reading out of class. The readers are classified into five levels using five different colors. Each book has a colored sticker on the spine. Students selected books well within their reading ability according to the levels set by the researcher.

## **3) Testing Materials**

These were reading comprehension tests containing three reading texts, and an accompanying set of two tasks: a written recall protocol (as mentioned earlier in Section 3.8 Measures) and a short answer questions (open-ended questions) which will be detailed next, with instructions to write everything the test takers could remember from the story and to answer the open-ended questions in Thai (see Appendix C1). These texts represent the same text genre, narrative, which constitutes the characteristics of graded readers.

## **4) A survey questionnaire**

This will be covered in the following section.

- **Measures**

Three kinds of measures were used in the study: written recall protocols, short-answer questions, and a questionnaire. Details are as follows.



### **1) Written Recall Protocols**

To test students' reading comprehension of the three texts, students wrote a free recall protocol of each text in Thai.

### **2) Short Answer Questions (SAQ)**

In order to assess the students' reading comprehension after reading graded readers extensively, the following types of questions were used in the tests.

1. A *main idea* question which asks for the central theme of the text.
2. A *detail* question which asks for bits of information directly stated in the text.
3. An *inference* question which asks for information that is implied, but not directly stated, in the passage.
4. A *sequence* question which requires knowledge of events in their order of occurrence.
5. A *cause-and-effect* question which names a cause and asks for its effect or mentions an effect and asks for its cause.
6. A *vocabulary* question which asks for the meaning of a word or phrase used in the text.

The question types used in the tests correspond to area of reading research as well as the nature of the treatment, extensive reading, that is to read for general reading comprehension (see Appendix C: Pilot instruments).

In short, SAQ are open-ended questions focusing on 6 aspects of comprehension: 1) *main idea*, 2) *detailed information* directly stated in the text, 3) *inference* that is implied, and not directly stated, 4) *sequence* of occurrence, 5) *cause-and-effect* and 6) *vocabulary* in the three reading passages. The test's reliability measured by the Cronbach Alpha coefficient was 0.888.

### **Scoring Method of Short Answer Questions (SAQ)**

The scoring method of the SAQ was '1' for a correct answer, '.5' for partly correct answer and a '0' for an incorrect answer.

### **3) A Questionnaire**

The attitude survey questionnaire was given at the end of the pilot only in the post-test in order to determine student satisfaction and dissatisfaction of ER after reading graded readers. This questionnaire was adapted from that of Maxim (1999). Participants completed the survey (Appendix C2) which consisted of 4 items of demographic information and 57 rating items using 7-point Likert scale and 3 ranking items. The survey took about 20 minutes to administer. The questionnaire's reliability using the Cronbach's Alpha coefficient as recommended by Dörnyei (2003) was 0.931 ( $k=47$ ).

To score the attitude surveys, the researcher tallied the answers by assigning a numerical value to each answer, i.e., 7 to "strongly agree", 6 to "agree", 5 to "neutral", 4 to "disagree", 3 to "strongly disagree", 2 to "I don't know", and 1 to "I don't understand the question". Totals were grouped into five main sections.

- **Procedure**

A three-step procedure was followed: (a) pre-test of reading comprehension; (b) treatment -- each student selected one reader per week to read out of class for two weeks; and (c) post-test of reading comprehension and an attitude questionnaire.

*Pre-test*

1. After signing consent forms, students took the pretest during normal class hour with no time limitation. The test consisted of three texts. Each text was followed by two tasks: written recall protocol and 10 short answer questions.
2. Students were instructed that the researcher was interested in the comprehension and recall of information about the reading texts that they would later be asked about what they had read and that they should read carefully.
3. Students were told that they could read the text as many times as they wished. When they finished reading the story, they wrote a recall protocol, i.e. they wrote everything they could remember, in Thai without referring to the text since it had been removed.
4. When students finished writing the recall, their answer sheets were collected and they were given another task, SAQ, to accomplish.
5. The test took up to two-and-a-half hours (2.30) for students to complete.

*Treatment*

6. *An orientation* told students what they would do and why they would be doing it. It included the following elements:

- Principles and theory
  - We learn to read by reading
  - Research results
- Goals
  - To develop overall reading comprehension
  - To increase general vocabulary knowledge
  - To enjoy reading
- Procedure
  - Reading a large quantity of self-selected, easy texts
  - Reading fluently without a dictionary
  - Class activities (e.g. sustained silent reading, oral book reports)
- Requirements
  - One graded reader per week
  - Records and reports to be written
- Materials
  - The system of levels (grades)
  - Availability and check out procedures
- *Self-selection of materials.* The teacher introduced features of the books, e.g. the back-cover blurb that summarized the book, the lists of chapter titles at the front, and the glossary at the back. Students opened the book at random and read a page, counting the words that were not known. Students selected a book with no more than five unknown words on the sample page.
- *No dictionaries.* Looking up words breaks the reader's concentration and makes students read less. Students were told to try to guess the meaning of

or ignore unknown words. Students were practicing reading, not learning vocabulary. The teacher used an overhead project (OHP) presenting a chart of contrasting intensive and extensive reading.

- Reading materials. The teacher introduced graded readers and explained the system of difficulty levels in which the books are arranged.
- *Activities:*
  - a. Book Talk by the Teacher. This activity represents the teacher as a role model. The teacher gave a 1-minute book report to the whole class, holding the book and showing the cover to the class as she talked.
  - b. Writing summary. Students were asked to write in Thai a short summary of the book or part of the book that they had read.
  - c. Giving oral reports. Individual students gave a 2-minute oral report on a book read to classmates. Time allotted depended on student willingness to report about their reading.

*Post-test*

7. Identical tests, measures, techniques, and data collections were used at the end of the 4 weeks of the ER sessions together with a questionnaire.
8. At the conclusion of the data collection process, 27 students read a total of 50 readers.

## **Data Analysis**

All data were analyzed with the Statistical Package for the Social Sciences (SPSS) version 13.0. Statistical comparison was used to show whether there was any difference in the reading areas of pre-test and post-test within the group in order to determine statistical differences (Connolly 2006). Effect size, a measure that gives indication of the strength of the finding (Mackey and Gass 2005: 282) was also reported.

An attitude survey toward different modes of exposure was analyzed by using percentage.

## **Results**

Results from the analysis of the data are presented in three following sections including a section of discussion as follows.

- **Results of Reading Comprehension Tests**

A chi-square test -- Wilcoxon signed rank test which is the nonparametric alternative to the paired-sample t-test was used to compare the pre- and post-tests of recalls and short answer questions of three texts as shown in Table 3.3.

Differences were found between pre- and post-tests of recalls of Text 1 (Anger) and Text 3 (Lucy and the chickens) ( $p < 0.05$ ,  $Z = 0.001$ ,  $0.010$ ). The strength of this relationship between pre- and post-tests reported was found to be fairly weak however ( $r = 0.002$ ). No difference were found between pre- and post-tests of recalls in Pair 2, Pair 4, Pair 5, and Pair 6 or those of short answer questions, in any of the six pairs of three texts. This will be discussed in the following section.

Table 3.3 Means, standard deviations of pre- and post-test scores on recalls and short answer questions, and number of students receiving extensive reading treatment

		<i>M</i>	<i>SD</i>	<i>n</i>	<i>Z</i> Sig. (2-tailed)
Pair 1	Text 1 Anger: recall pre-test	1.18	2.47	25	0.001*
	post-test	2.32	2.68	25	
Pair 2	Text 1 Anger: SAQ pre-test	3.38	2.22	26	0.168
	post-test	2.96	1.66	26	
Pair 3	Text 2 Lucy & the chickens: recall pre-test	2.56	2.53	25	0.010*
	post-test	3.58	2.17	25	
Pair 4	Text 2 Lucy & the chickens: SAQ pre-test	4.16	2.05	25	0.842
	post-test	4.04	2.00	25	
Pair 5	Text 3 The choking dog: recall pre-test	2.22	2.33	25	0.864
	post-test	2.24	2.04	25	
Pair 6	Text 3 The choking dog: SAQ pre-test	2.70	1.39	24	0.133
	post-test	3.20	1.55	24	

The difference is significant at .05 level (\* $p < .05$ ).

### • Results of Attitude Survey

The results of participants' attitudes were examined using percentages, focusing on (i) reading and foreign language learning, (ii) extensive reading with respect to reading ability development, and (iii) students' reading habits. Findings indicate a positive attitude to extensive reading but a small amount of time spent

on reading either in Thai and in English (6 to 10 hours for reading in Thai and 1 to 5 hours for reading in English per month). The respondents most strongly agreed that learning to read English is an important skill for developing proficiency in a foreign language. They also strongly agreed that reading helped them obtain vocabulary knowledge, understand spoken English, write in English and participate in English conversations. Across 47 items, 17.02% of the respondents strongly agreed, 63.83 % agreed, and the remaining 19.15 % were neutral.

- **Results of Interviews**

The interview with 8 students(36%) revealed that their perception of reading comprehension was a positive one. They understood and enjoyed the stories overall. Some found one of the books difficult to read. Most had become able to read faster and preferred to continue participating in the programme.

### **Discussion**

The study produced some expected results and some unexpected results. With regard to the first question, will students' comprehension improve after they have been exposed to ER, the answer is 'yes' based on the results of the recall measure on two out of the three texts but this is so little improvement that it may not be considered as a result of ER. However, there was no reliable difference between students' comprehension in pre- and post-test of short answer questions for any the three texts. This result is the opposite of what would have been expected. Students could not answer the open-ended questions which may be due to the difficulty of the structure of the affirmative sentences used. Although the researcher made an attempt to avoid using complex sentences, the structure of



questions in English is very different from that of their native language (Thai), which hindered them from understanding the questions.

In regard to the second question, will students have positive attitudes to ER, the answer is 'yes'. Students strongly agree that extensive reading enhance their reading comprehension skills and would prefer to have this kind of experience again. This is consistent with the results of individual interviews and observations. Students felt ER interesting and challenging because apart from normal classes, they had no other English activities. This may be the case that reading was neither assigned by the teacher nor completed as a required part of the class. Students chose what, where and when they wanted to read and read it independently of the teacher. Moreover, they were instructed to stop reading if the material was not interesting or too difficult. They returned the book and selected a new one. Thus, students were able to read with ease and confidence.

### **Limitations of the Pilot Study**

An inevitable limitation of a pilot study of this type was the small sample size and a six-week period, which may have reduced the opportunity to detect an improvement in reading comprehension over time. The lack of a control group also restricted the interpretation of the findings. Although the participants were instructed not to look up unfamiliar words in the dictionary while reading the graded readers, there was no control over the use of the dictionary during the programme since students read the readers on their own out of class.

### **3.10 Chapter Summary**

This chapter has given an account of the methodology and design of the study. It has also presented the preparation of the materials and the tests for the study. The chapter started with descriptions of the epistemological and philosophical stance of the research, and its aims and objectives, followed by the research hypotheses, research questions and variables. Then, the methodology, and the research design were outlined. The selection of the test texts and readability devices were discussed. The chapter, further, provided detailed information about the pilot study, including its objectives, research questions, methodology and findings together with the ethical issues pertaining to the data collection of the study.

## **CHAPTER 4**

### **AN ANALYSIS OF RESULTS**

#### **4.1 Introduction**

In this chapter, the results of the study will be presented according to the research questions stated in chapter two. Due to the complex nature of the study, the use of data from different sources, viz. reading comprehension tests, reading fluency tests, questionnaires and interviews are complementary. A great deal of detailed research data has been collected - on reading comprehension and fluency tests, questionnaire questions, interview responses. However only those data which address the research questions will be used for the analysis. In the

following analysis, the results of the reading comprehension tests and the reading fluency tests will be presented first, followed by the results of the attitudes questionnaires and individual interviews.

More specifically, the chapter contains four major sections pertaining to the results of the analysis of the scores on reading comprehension and the scores of word per minute (wpm) on reading fluency of participant groups in order to see whether differences exist between EFL students who were exposed to ER compared with those who were not exposed to ER. It also presents the results of the analysis of a survey questionnaire including an interview relating to participants' attitudes toward ER in order to see whether EFL students who were exposed to ER hold a positive or negative attitude to ER. The purpose of this study was to determine whether there was any difference between the two reading instructions, ER and no ER, on the two reading areas, i.e. comprehension and fluency as well as an investigation of attitudes to ER.

The data were analyzed to test these three research (null) hypotheses.

1. There will be no statistical difference among the groups in the scores of the reading comprehension post-test as measured by written recall protocols after treatment.
2. There will be no statistical difference among the groups in the scores of the reading comprehension post-test as measured by translation after treatment.
3. There will be no statistical difference among the groups in the scores of reading fluency as measured by word per minute (wpm) after treatment.

Before we can fully analyze the results it will firstly be necessary to address some relevant statistics in this analysis. The following, then, briefly describes

inferential statistics, i.e. parametric and non-parametric tests. Then, the selection of statistics used in the study is summarized. Finally the results of the analysis are presented based on the research questions.

## **4.2 Inferential Statistics**

Inferential statistics are techniques which deal with probability (McCullagh, 1974: 1). They are values calculated from a sample and used to estimate the same value for a population (Finn et al. 2000: 215). There are two types of inferential statistics: parametric statistics using interval/ratio data and non-parametric statistics using ordinal (ranked) or nominal data. Both assume that the sample has been obtained through probability sampling, i.e. a process in which each element of the population has an equal chance of being chosen for the sample. Methods of probability sampling include simple random sampling, stratified random sampling, systematic sampling, and cluster sampling (Seaman and Verhonick 1982: 135).

### **Parametric and Non-Parametric Tests**

The term *parameter* refers to a measure which describes the distribution of the population such as its mean or variance. Parametric tests are so called because they are based on assumptions about the parameters of the population from which the sample has been drawn (Cramer 1994: 53).

In this analysis, since we are interested in determining whether two or more groups differ in some variables, tests of difference will be used to ascertain whether two or more groups differ in some variables. The researcher considers parametric tests first if the data meet the requirements of the tests. This means that

when the data fulfill the following three conditions, parametric tests will be applied:

1. the variables are measured with an equal interval or ratio scale; and the samples are drawn from populations;
2. whose variances are equal or homogeneous; and
3. whose distributions are *normal*. (A normal distribution is a theoretical or idealized one which is based on a population of an infinite number of cases and which takes the form of a bell or an inverted-U: Cramer 1994: 53).

With respect to the above conditions, from the data analysis, distributions of the scores in most of the tests were non-normal. In this circumstance, it is necessary to either transform the scores to normality (Tabachnick and Fidell 1989 cited in Cramer 1994: 56) or use a non-parametric test. This study, thus, used the non-parametric tests whose advantages will be explained as follows.

### **Advantages of Using Non-Parametric Test**

Non-parametric tests are sometimes known as assumption-free tests because they make fewer assumptions about the type of data which can be used (Field 2009: 540). Non-parametric procedures are most useful for small samples when there are serious departures from the required assumptions. They are also useful when outliers are present, since the outlying cases will not influence the results as much as they would if we used a test based on an easily influenced statistic, such as the mean (Norusis 2002: 386). In other words, one of the advantages of having used a non-parametric test is that we know that the outliers

will not bias the results because it was the ranks that were analyzed not the actual data collected (Field and Hole 2006: 243).

### **4.3 Preliminary Analysis and Related Statistics**

In order to ascertain that both groups started equally in terms of the overall reading comprehension, two non-parametric tests were run. This analysis is supplementary to the previous English 1 grade that had been used in the selection of the six student groups of the study (by purposive sampling) as already explained in chapter three. The first is the **Kruskal-Wallis  $K$  test** and the second is the Mann-Whitney  $U$  test (see Tables 4.1 and 4.2). The former is the non-parametric version of one-way *independent ANOVA* which is used to test whether more than two independent groups differ (Field 2009). In the Kruskal-Wallis  $K$  test, the data are converted to ranks and the distribution of the ranks among the various groups determines the value of the test statistic (Kinnear and Gray 2006: 261). The Kruskal-Wallis procedure tests the null hypothesis that the population distributions for the three (or more) independent groups are identical against the alternative that these are differences in the distributions. In this analysis, the Kruskal-Wallis test was used to compare 1) the reading comprehension of students in four groups for preliminary analysis, 2) reading comprehension of students between 6 groups in the main study, 3) and the reading fluency of students between 6 groups in the main study (Polit 1996: 205).

The latter, the **Mann-Whitney  $U$  test**, is an alternative to the independent samples  $t$  test. This technique is used to test for differences between two independent groups on a continuous measure. Instead of comparing means of the two groups, as in the case of the  $t$ -test, the Mann-Whitney  $U$  test actually

compares medians. It converts the scores on the continuous variable to rank, across the two groups. It then evaluates whether the ranks for the two groups differ significantly. As the scores are converted to ranks, the actual distribution of the scores does not matter (Pallant 2007: 220). The Mann-Whitney *U* test was used as a post-hoc test as explained next, in order to follow-up the findings from the Kruskal-Wallis *K* test. Even if we obtain a statistically significant result from the Kruskal-Wallis test; we still do not know which of the groups are statistically significantly different from one another. In other words, as with ANOVA, a significant result does not mean that all groups are significantly different from one another. A **post hoc test** (post hoc meaning “after the fact”), a special type of statistical tests that allows us to compare the means of specific groups and protect against inflated Type I Errors (Allen and Pittenger 2000: 128) is needed to determine the nature of the difference between groups of students and reading comprehension together with fluency. Various procedures have been proposed. But the one that is most often recommended is the *Dunn procedure* (Polit 1996: 206). This procedure involves using the Mann-Whitney *U* test to compare the ranks for all possible pairs of groups. However, to avoid a higher-than-desired risk of a Type I error, a correction factor referred to as a **Bonferroni correction** is used. This will also be explained here with three other concepts in relation to the testing for statistical significance.



## Controlling the Risk of Errors

According to Polit (1996), because statistical inference is based on data that are incomplete, there is always a risk of error. The researcher does not realize when a Type I or Type II error has been committed. A Type I or *alpha* error is an error that occurs when the null hypothesis (as explained next) is rejected when it should have been retained; that is, a significant difference is claimed when there is none. A Type II or *beta* error is an error that occurs when we retain the null hypothesis when it should have been rejected; there is a significant difference but we fail to claim it (Walsh 1990: 367). Only by knowing the population values would the researcher be able to definitively conclude whether the null hypothesis is rejected or corroborated, the null hypothesis is being a formal statement declaring that the sample value is equal to the population value or that the value of sample 1 is equal to the value of sample 2. A statement of “no difference” (Walsh 1990: 364), is true or false (Cramer 1994: 52). However, the researcher can control the probability of committing an error. Type I errors can be controlled through the **level of significance**, which is the probability level established by the researcher as the accepted risk of making a Type I error. Inferential statistics always involve a comparison of a computed statistic against the probability in a theoretical distribution. The level of significance, symbolized as  $\alpha$  (alpha), indicates the size of the area in the theoretical probability distribution that corresponds to the rejection of the null hypothesis.

By convention, a cut-off point of  $p = 0.05$  (or a 5 percent chance, i.e.  $\alpha = 0.05$ ) is used to determine whether we can have confidence in a finding derived from our sample or not (Connolly: 162). In other words, the conventional probability or  $p$  value for deciding that a result is not due to chance is less than

0.05, or five times out of a hundred (Cramer 1994: 50), that is the accepted standard for the level of significance is the .05 level. This corresponds to the 95% confidence level. With a .05 level of significance, we are accepting the risk that out of 100 samples, we would reject a true null five times. Conversely, with  $\alpha = .05$ , the probability is .95 ( $1 - \alpha$ ) that a true null hypothesis will be accepted.

Researchers sometimes establish a stricter level of significance. With an  $\alpha$  of .01, the risk is that in only 1 out of 100 samples would we erroneously reject a true null hypothesis. And with the highly stringent significance level of .001, the risk is even lower: in only 1 out of 1000 samples would we be in error by rejecting the null hypothesis.

Researchers can also exert some control over Type II errors, but the situation with Type II errors is much more complex. The probability of committing a Type II error is symbolized as  $\beta$  (beta); the probability of correctly rejecting the null hypothesis when it is false ( $1 - \beta$ ) is referred to as the **power** of the statistical test. The risk of a Type II error is affected by many factors, such as sample size, the research design, the strength of the underlying relationship between variables, and the type of statistical test being used. Moreover, the probability of committing a Type II error increases as the risk of making a Type I error decreases. In other words, when researchers establish a very strict criterion for  $\alpha$ , they increase the probability of committing a Type II error (Polit 1996: 107-108).

In this regard, as mentioned earlier, in order to control for a Type I error or *alpha error*, we need to apply a **Bonferroni correction** which involves revising the significant level to the alpha values used to indicate significance, since we intend to compare all groups with one another (e.g. 1 with 2, 1 with 3, and 2 with

3). Bonferroni adjustment or correction involves setting a more stringent alpha level for each comparison, to keep the alpha level across all the tests at a reasonable level. To achieve this, we can divide our alpha level (usually .05) by the number of comparisons that we intend to make, and then use this new value as the required alpha level (Pallant 2006: 200). Here in the present study, to test for differences between the six pairs at the .05 significance level, the  $\alpha$  would be  $.05 \div 6$ , or .0083. This means that for a difference between pairs to be significant at  $\alpha = .05$ , the computed value for the  $U$  statistic would be compared to the critical value for  $\alpha = .0083$ . If we were to apply the Dunn procedure to our current analysis, this would mean a stricter alpha level of .0083 or ( $p < .0083$ ). Finally, alongside reporting that a finding is “statistically significant” the need was stressed to calculate and report the associated *effect size* (Connolly 2007).

To sum up, in order to control the overall *Type I error rate* when multiple significance tests are carried out, a Bonferroni correction is applied to the  $\alpha$  level. Each test conducted uses a criterion of significance of the  $\alpha$ -level (normally .05) divided by the number of tests conducted (Field 2009: 782).

## Effect Size

Effect size is a measure of the strength of the relationship between two variables in the population. It is an index of how wrong the null hypothesis is (Polit 1996: 140). Many measures of effect size have been proposed, including Cohen's  $d$ , Pearson's correlation coefficient  $r$  and the odds ratio (Field, 2009: 57). The most commonly used are eta squared and Cohen's  $d$  (Pallant 2007: 235).

According to Field (2009), effect sizes are useful because they provide an objective measure of the importance of an effect. Cohen (1988, 1992 cited in Field 2009) has made some widely used suggestions about what constitutes a large or small effect:

- $r = .10$  (small effect): In this case the effect explains 1% of the total variance.
- $r = .30$  (medium effect): The effect accounts for 9% of the total variance.
- $r = .50$  (large effect): The effect accounts for 25% of the total variance.

Unfortunately, SPSS, the programme used in this data analysis, does not calculate the effect size directly and so we need to calculate it ourselves from the Z-score produced by SPSS by dividing the Z-score by the square root of the total sample size. The equation to convert a z-score into the effect size estimate,  $r$ , is as follows (from Rosenthal, 1991: 19 cited in Field 2009: 550; Connolly 2007: 193):

$$\text{Effect size, } r = \frac{Z}{\sqrt{n}}$$

in which  $z$  is the z-score that SPSS produces and  $N$  is the size of the study (i.e. the number of total observations on which  $z$  is based).

In short, effect size is an objective and standardized measure of the strength or magnitude of the relationship between the two observed variables. It is used to test whether effects are genuine because even if a test statistic is significant, it does not mean that the effect it measures is meaningful or important. Therefore, we need to measure the size of the effect that we are testing in a standardized way. When we measure the size of an effect, it is known as an effect size (Field 2009: 785, 56).

### **Wilcoxon Matched-Pairs Signed-Rank Test**

The Wilcoxon signed-rank test, a non-parametric equivalent of the dependent  $t$ -test is used in situations in which there are two sets of scores to compare, but these scores come from the same participants. This test works in a similar way to the dependent  $t$ -test in that it is based on the differences between scores in the two conditions and is used for testing differences between groups when there are two conditions and the same participants have been used in both conditions (Field and Hole 2006: 239). Instead of comparing means, the Wilcoxon converts scores to ranks and compares them at Time 1 or condition 1 and at Time 2 or condition 2 (Pallant 2007). The test rests on the argument that if there is no difference between the two sets of scores, the sum of the ranks for + differences will be about the same as the sum of the ranks for the – differences. If the sum of + differences are very dissimilar to the sum of the – differences, then it is likely there is a reliable difference between the two sets of scores (Foster 1998: 197).

## Summary of Six Sets of Data Analysis with Test Statistics Used

Table 4.1 Summary of six sets of data analysis with test statistics used

<b>Data</b>	<b>Statistics Test Used</b>
1) Reading comprehension pre-tests between 4 groups (Preliminary analysis of pre-test)	1. Kruskal-Wallis Test
	2. Post-hoc Mann-Whitney Test
	3. Bonferroni Correction
	4. Effect size
2) Reading comprehension pre- and post-tests within 4 groups	1. Wilcoxon Matched-Pairs Tests
	2. Effect size
3) Reading comprehension post-tests between 6 groups	1. Kruskal-Wallis Test
	2. Post-hoc Mann-Whitney Test
	3. Bonferroni Correction
	4. Effect size
4) Reading fluency tests between 6 groups	1. Kruskal-Wallis Test
	2. Post-hoc Mann-Whitney Test
	3. Bonferroni Correction
	4. Effect size
5) Attitude questionnaires	Frequency using percentage
6) Interview data	Frequency using percentage

Having discussed the relevant statistics employed in the study, we can now turn to the results of the preliminary analysis of the comprehension test first, followed by the results of the comprehension pre- and post-tests and those of the

reading fluency tests. Finally, the results of the attitude questionnaires and the in-depth interviews are presented.

#### **4.4 Results of the Preliminary Analysis of Comprehension Pre-Test between Four Groups**

In this preliminary analysis, the Kruskal-Wallis test was used. The Kruskal-Wallis test (see Table 4.2), which is the non-parametric alternative to a one-way between groups ANOVA, allows us to compare the scores on continuous variable, i.e. comprehension scores for three or more groups (four in this analysis). Scores are converted to ranks and the mean rank for each group is compared. This is a 'between groups' analysis, so different students must be in each of the different groups. (The purpose of this analysis has been explained earlier in section 4.3).

**Question:** Is there a difference in reading comprehension pre-test scores across four groups consisting of two experimental groups: E1 and E2 and two control groups (pre- and post-test): C1a and C1b ?

The Kruskal-Wallis test (Table 4.2 below) revealed a statistical difference in reading comprehension scores across four different groups: two experimental groups (E1,  $n = 46$ , E2,  $n = 36$ ) and two control groups (C1a,  $n = 16$ , C1b,  $n = 30$ ) at the 0.05 level of significance ( $p < .05$ ) for four out of six tests,  $\chi^2 (3, n = 128) =$  Anger: recall, 14.71, .002\*; Anger: translation, 16.14, .001\*; Lucy: recall, 14.41, .002\*; Lucy: translation, 10.73, .013\* whereas the other two were not significantly different,  $\chi^2 =$  Sad: recall, 0.12, *ns*, and Sad: Translation, 2.43, *ns*.

Participants' scores on reading comprehension were significantly affected by the three texts (Anger, Lucy, Sad) and the format of test given to them (written recall protocols and translations). Another test, the post hoc test, is calculated further in the next section.

Table 4.2 Kruskal-Wallis *K*-test comparing pre-test scores of four groups

Group	N	Anger		Lucy		Sad	
		Recall	Translation	Recall	Translation	Recall	Translation
		Mean	Mean	Mean	Mean	Mean	Mean
		Rank	Rank	Rank	Rank	Rank	Rank
E1	46	69.76	61.04	78.03	74.45	65.57	70.98
E2	36	75.17	84.43	49.10	63.99	64.54	62.85
C1a	16	35.13	47.63	52.66	39.31	61.91	57.53
C1b	30	59.30	54.88	68.55	63.30	64.20	60.27
Total	128						
<b>Chi-Square</b>		<b>14.712</b>	<b>16.143</b>	<b>14.408</b>	<b>10.725</b>	<b>0.119</b>	<b>2.431</b>
df		3	3	3	3	3	3
<b>Asymp. Sig.</b>		<b>.002*</b>	<b>.001*</b>	<b>.002*</b>	<b>.013*</b>	<b>.989</b>	<b>.488</b>

The difference is significant at .05 level (\*  $p < 0.05$ ).

The Mann-Whitney test was used as a post hoc test to follow-up the previous findings from the Kruskal-Wallis test. The results of this follow-up test are shown in Table 4.3 below. A Bonferroni correction was applied ( $.05/6 = .0083$ ) and so all effects are reported at a .0083.

It is useful to note that by looking at the test statistic, we can gain some idea of what the nature of the differences in the pre-test scores on comprehension between the four groups are from the means rank shown. To interpret these, it should be remembered that high scores were given low ranks. Thus, for example, as E1 had a lower mean rank (34.62) than E2 (50.29), this indicates that they achieved higher pre-test scores, on average, than E2.



The results of the post-hoc Mann-Whitney test are contradict those from the first test calculated by the Kruskal-Wallis test. The results suggest that seventeen out of eighteen (17/18) of the comprehension scores of 6 tests (three texts: Anger, Lucy and Sad with two types of test tasks: written recall protocols and translations) from the four groups (two experimental groups: E1 and E2 and two controlled groups: C1a and C1b) were not significantly different:

1. Anger: recalls between C1a & C1b,  $U = 135.50$ , *ns*;

E1 & E2,  $U = 814$ , *ns*;

E1 & C1b,  $U = 595$ , *ns*;

2. Anger: translations between C1a & C2b,  $U = 200.50$ , *ns*;

E1 & C1b,  $U = 615.50$ , *ns*;

3. Lucy: recalls between E2 & C1a,  $U = 287.50$ , *ns*;

E1 & C1b,  $U = 577.50$ , *ns*;

C1a & C1b,  $U = 173.50$ , *ns*;

4. Lucy: translations between C1a & C1b,  $U = 150$ , *ns*;

E1 & E2,  $U = 670.50$ , *ns*;

C1b & E2,  $U = 524.50$ , *ns*;

5. Sad: recalls between C1a & C1b,  $U = 238.50$ , *ns*;

E1 & E2,  $U = 812.50$ , *ns*;

E2 & C1b,  $U = 532$ , *ns*;

6. Sad: translations between C1a & C1b,  $U = 288$ , *ns*;

E1 & E2,  $U = 701$ , *ns*;

E2 & C1b,  $U = 501$ , *ns*, respectively.

The only pair among all of the eighteen groups compared in this follow-up test that is significantly different is Anger: translation between E1 and E2,  $U = 511.50$ ,  $r = .33$  with a medium effect size.

We can conclude that there was only one test -- Anger: translations with a medium effect size in the difference of scores on reading comprehension between the two experimental groups (E1 and E2) but it was not considerably significant, while none of the other comprehension scores of the four groups (from Anger: recall, Lucy: recall & translation and Sad: recall & translation) were not significantly different at the outset of the experiment. In other words, the test reflected the fact that neither the experimental nor the control groups showed any significant differences at the .0083 level of significance.

To put it more simply, the findings reveal that the study comprises the four student groups of equal reading comprehension ability prior to the experiment. This is important because this statistical evidence obtained from the preliminary analysis will ascertain internal validity of the study. To reiterate, one consideration of the study in this study was the selection of the students. Due to the fact that, it was not possible to select students at random since the students were existing groups who were enrolled to study English 2 as mentioned earlier in chapter three, the researcher selected the students based on their English 1 grade, that is students in each of the six groups have the average grade of C equally or nearly equally. The second consideration was that of equal reading ability prior to the experiment. Therefore, these results revealed that their comprehension was not statistically significantly different as reported above.

Table 4.3 Post-hoc Mann-Whitney *U*-test comparing pre-test scores on eighteen group differences

**1 Anger Recall**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks
C1a	16	16.97	271.50	E1	46	41.2	1895.00	E1	46	40.57	1866.00
C1b	30	26.98	809.50	E2	36	41.89	1508.00	C1b	30	35.33	1060.00
Total	46			Total	82			Total	76		
Mann-Whitney U			135.500	Mann-Whitney U			814.000	Mann-Whitney U			595.000
Z			-2.441	Z			-.132	Z			-1.017
Asymp. Sig. (2-tailed)			.015	Asymp. Sig. (2-tailed)			0.895	Asymp. Sig. (2-tailed)			.309

The difference is significant at .0083 level (\* $p < .0083$ ).

**2 Anger Translation**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks
C1a	16	21.03	336.50	<b>E1</b>	<b>46</b>	<b>34.62</b>	<b>1592.50</b>	E1	46	40.12	1845.50
C2b	30	24.82	744.50	<b>E2</b>	<b>36</b>	<b>50.29</b>	<b>1810.50</b>	C1b	30	36.02	1080.50
Total	46			<b>Total</b>	<b>82</b>			Total	76		
Mann-Whitney U			200.500	<b>Mann-Whitney U</b>			<b>511.500</b>	Mann-Whitney U			615.500
Z			-.912	<b>Z</b>			<b>-2.96</b>	Z			-.793
Asymp. Sig. (2-tailed)			.362	<b>Asymp. Sig. (2-tailed)</b>			<b>.003**</b>	Asymp. Sig. (2-tailed)			.428
				<b>Effect Size</b>			<b>.327</b>				

The difference is significant at .0083 level (\* $p < .0083$ ).

\*\*  $p < 0.0083$

**3 Lucy Recall**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks
E2	36	26.51	954.50	E1	46	40.95	1883.50	C1a	16	19.34	309.50
C1a	16	26.47	423.50	C1b	30	34.75	1042.50	C1b	30	25.72	771.50
Total	52			Total	76			Total	46		
Mann-Whitney U			287.500	Mann-Whitney U			577.500	Mann-Whitney U			173.500
Z			-.010	Z			-1.201	Z			-1.541
Asymp. Sig. (2-tailed)			.992	Asymp. Sig. (2-tailed)			.230	Asymp. Sig. (2-tailed)			.123

The difference is significant at .0083 level (\* $p < .0083$ ).

Table 4.3 The post-hoc Mann-Whitney *U*-test comparing pre-test scores on group differences (continued)

**4 Lucy Translation**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks
C1a	16	17.88	286.00	E1	46	44.92	2066.50	C1b	30	32.98	989.50
C1b	30	26.50	795.00	E2	36	37.13	1336.50	E2	36	33.93	1221.50
Total	46			Total	82			Total	66		
Mann-Whitney U			150.000	Mann-Whitney U			670.500	Mann-Whitney U			524.500
Z			-2.077	Z			-1.472	Z			-.200
Asymp. Sig. (2-tailed)			.038	Asymp. Sig. (2-tailed)			.141	Asymp. Sig. (2-tailed)			.842

The difference is significant at .0083 level (\* $p < .0083$ ).

**5 Sad Recall**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks
C1a	16	23.41	374.50	E1	46	41.84	1924.50	E2	36	33.28	1198.00
C1b	30	23.55	706.50	E2	36	41.07	1478.50	C1b	30	33.77	1013.00
Total	46			Total	82			Total	66		
Mann-Whitney U			238.500	Mann-Whitney U			812.500	Mann-Whitney U			532.000
Z			-.035	Z			-.145	Z			-.103
Asymp. Sig. (2-tailed)			.972	Asymp. Sig. (2-tailed)			.884	Asymp. Sig. (2-tailed)			.918

The difference is significant at .0083 level (\* $p < .0083$ ).

**6 Sad Translation**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks
C1a	16	22.75	364.00	E1	46	44.26	2036.00	E2	36	34.58	1245.00
C1b	30	23.9	717.00	E2	36	37.97	1367.00	C1b	30	32.2	966.00
Total	46			Total	82			Total	66		
Mann-Whitney U			228.000	Mann-Whitney U			701.000	Mann-Whitney U			501.000
Z			-.277	Z			-1.187	Z			-.502
Asymp. Sig. (2-tailed)			.782	Asymp. Sig. (2-tailed)			.235	Asymp. Sig. (2-tailed)			.615

The difference is significant at .0083 level (\* $p < .0083$ ).

#### **4.5 Results of Reading Comprehension Pre- and Post-Test within Four Groups**

**Research Question 1:** Is there a significant difference in pre- and post-test scores on reading comprehension of the 4 groups: 2 experimental groups (E1 and E2) and 2 control groups --pre-test/post-test (C1a and C1b)? From this research question, we can generate the following alternative and null alternative hypothesis:

- $H_1$ : There are differences between the pre- and post-test scores on reading comprehension of the four groups at the end of the treatment.
- $H_0$ : There are no differences between the pre- and post-test scores on reading comprehension of the four groups at the end of the treatment.

The purpose of this analysis (within-subjects experiment which has two scores for each subject) is to see whether reading comprehension of E1 and E2 increased after exposure to ER and whether reading comprehension of C1a and C1b increased without ER. The non-parametric alternative to the repeated measures t-test, namely the Wilcoxon matched-pairs signed-rank test for two related samples was used in this analysis. The test was conducted to examine differences between the medians of pre- and post-test scores from six tests (three texts containing two test tasks in each) within each group. The results of the entire 24 tests are shown in Table 4.4 below. The following are the results of the six tests within each group as reported in turn with a summary table.

Table 4.4 Wilcoxon matched-pairs test comparing pre- & post-test scores within four student groups

Group N	Anger								Lucy						Sad										
	Recall				Translation				Recall			Translation			Recall			Translation							
	Pretest	Posttest			Pretest	Posttest			Pretest	Posttest		Pretest	Posttest		Pretest	Posttest		Pretest	Posttest		Pretest	Posttest			
	Neg	Pos	Sum of Ranks		Neg	Pos	Sum of Ranks		Neg	Pos	Sum of Ranks	Neg	Pos	Sum of Ranks	Neg	Pos	Sum of Ranks	Neg	Pos	Sum of Ranks	Neg	Pos	Sum of Ranks		
E1	46	11	23	<b>146.50</b>	448.50	8	35	<b>115.00</b>	831.00	6	35	<b>122.00</b>	739.00	29	16	755.00	<b>280.00</b>	9	32	<b>133.00</b>	728.00	20	22	<b>385.00</b>	518.00
	Median	3	5		9	13.50		6	7		24.25	21.50		5	6.50		24.75	24.25							
	Range	9	8		31	31		9.50	9		58	57		8	10		42.50	45							
Z			-2.607			-4.327			-4.025			-2.682			-3.867			-0.832							
Exact. Sig. (2-tailed)			.008*			.000*			.000*			.007*			.000*			.411							
Effect Size			.384			.638			.593			.395			.570										
E2	36	5	29	<b>66.00</b>	529.00	18	17	322.00	<b>308.00</b>	4	31	<b>22.50</b>	607.50	23	11	459.50	<b>135.50</b>	2	32	<b>5.50</b>	589.50	10	26	<b>166.00</b>	500.00
	Median	2	5		14.50	12.75		3	6.50		19.75	17.75		4	8		21.25	21.75							
	Range	7.50	7		24.50	30		6.50	6.50		40	35		9.50	8.50		42	36							
Z			-3.976			-0.115			-4.798			-2.771			-4.996			-2.626							
Exact. Sig. (2-tailed)			.000*			.913			.000*			.005*			.000*			.008*							
Effect Size			.663			.800			.462			.833			.438										
C1a	15	1	10	<b>5.50</b>	60.50	7	6	48.50	<b>42.50</b>	2	8	<b>15.00</b>	40.00	5	9	<b>34.50</b>	70.50	3	10	<b>27.00</b>	64.00	8	7	80.50	<b>39.50</b>
	Median	.50	1		4	5		1.50	3		11	12		3.50	4		15.50	11							
	Range	9	7.50		22	18		8.50	8		27.50	30.50		9	10		35	39.50							
Z			-2.461			-0.210			-1.287			-1.131			-1.316			-1.165							
Exact. Sig. (2-tailed)			.013*			.852			.213			.274			.203			.258							
Effect Size			.635																						
C1b	29	6	19	<b>58.00</b>	267.00	8	21	<b>167.00</b>	268.00	5	21	<b>64.50</b>	286.50	15	14	260.50	<b>174.50</b>	3	25	<b>21.00</b>	385.00	11	16	<b>144.00</b>	234.00
	Median	1.50	4		7	8		5	6.50		18.50	16.50		4.50	7		16	19							
	Range	7.50	8		29	27		9	9		50.50	42.50		9	6.50		37	37							
Z			-2.818			-1.094			-2.828			-.930			-4.148			-1.082							
Exact. Sig. (2-tailed)			.005*			.274			.005*			.352			.000*			.279							
Effect Size			.515			.516			.757																

\* The difference is significant at the .05 level.

## E1

Before we look at the results of the analysis for each group in detail, let us look at the following summary Table 4.5 which provides an overview of the overall results of each group in the study. The first column indicates the scores of the six tests, the column *Post-test > Pre-test* indicates whether the finding of each test is possible in this column, and so do the column *Pre-test > Post-test* as well as *Pre-test = Post-test*. The *medium*, *r* and *large r* represent the level of effect size of the tests. Tables 4.6, 4.7, 4.8 and 4.9 involve the same illustrated symbols, but they are different in the findings obtained. We will now look at the finding of each group in turn; and will discuss these findings in greater detail in Chapter Five.

1) For Anger: recall, the reading comprehension of the pre-test was significantly less than that of the post-test ( $Mdn = 3, 5$ ),  $T = 157.50$ ,  $p < .05$ , with a medium effect size ( $r = .38$ ); and so was that of translation, ( $Mdm = 9, 13.50$ ),  $T = 115$ ,  $p < .05$ , with a large effect size ( $r = .64$ ).

2) For Lucy: recall, the reading comprehension of the pre-test was significantly less than that of the post-test ( $Mdn = 7, 7$ ),  $T = 122.00$ ,  $p < .05$ , with a large effect size ( $r = .60$ ); however, this is opposite to the result for translation which was significantly lower on post-test than on pre-test ( $Mdn = 21.50, 24.25$ ),  $T = 280$ ,  $p < .05$ , with a medium effect size ( $r = .40$ ).

3) For Sad: recall, the reading comprehension of the pre-test was significantly less than that of the post-test ( $Mdn = 5, 6.50$ ),  $T = 133$ ,  $p < .05$ , with a large effect size ( $r = .57$ ); but for translation, the two tests did not differ significantly ( $Mdm = 24.75, 24.25$ ),  $T = 385$ ,  $p < .05$ , *ns*.

To sum up, out of the 6 tests used to measure whether reading comprehension of 46 participants in experimental group 1 (E1) improves after exposure to extensive reading (ER), the findings showed that (see Table 4.3 below) the post-test scores on four out of six tests (4/6) were significantly higher than that of the pre-test (see the summary Table 4.5 below) whereas, in contrast, the pre-test scores on only one test (1/6) were significantly higher than those of the post-test. Additionally, there was also one test (1/6) showing that the pre-test and post-test scores were not significantly different.

Table 4.5 Summary of Wilcoxon test comparing pre- and post-test scores within E1

<b>Test</b>	<b>Post-test &gt; Pre-test</b>	<b>Pre-test &gt; Post-test</b>	<b>Pre-test = Post-test</b>
1 Anger: recall	√, medium <i>r</i>		
2 Anger: translation	√, large <i>r</i>		
3 Lucy: recall	√, large <i>r</i>		
4 Lucy: translation		√, medium <i>r</i>	
5 Sad: recall	√, large <i>r</i>		
6 Sad: translation			√
<p>Note: “√” represents the result of the test.  “<i>r</i>” represents the effect size.</p>			



## E2

1) For Anger: recall, the reading comprehension of the pre-test was significantly less than that of the post-test ( $Mdn = 2, 5$ ),  $T = 66$ ,  $p < .05$ , with a large effect size ( $r = .66$ ); but for translation, neither tests ( $Mdm = 14.50$ ) differs significantly ( $Mdm = 14.50, 12.75$ ),  $T = 308$ ,  $p < .05$ , *ns*.

2) For Lucy: recall, the reading comprehension of the pre-test was significantly less than that of the post-test ( $Mdn = 3, 6.50$ ),  $T = 22.50$ ,  $p < .05$ , with a large effect size ( $r = .80$ ); however, this is opposite to results for translation which were significantly lower on posttest than on pretest ( $Mdn = 17.75, 17.75$ ),  $T = 135.50$ ,  $p < .05$ , with a medium effect size ( $r = .46$ ).

3) For Sad: recall, the reading comprehension of the pre-test was significantly less than that of the post-test ( $Mdn = 4, 8$ ),  $T = 5.50$ ,  $p < .05$ , with a large effect size ( $r = .83$ ); and so was that of translation, ( $Mdm = 21.25, 21.75$ ),  $T = 166$ ,  $p < .05$ , with a medium effect size ( $r = .44$ ).

To sum up, out of the 6 tests used to measure whether reading comprehension of 36 participants in experimental group 2 (E2) improves after exposure to extensive reading (ER), the findings showed that the post-test scores on four out of six tests (4/6) were significantly higher than those of the pre-test (see the summary Table 4.6 below). However, in contrast, the pre-test scores on only one test (1/6) were significantly higher than that of the post-test. Moreover, there was also only one test (1/6) showing that the pre-test and post-test scores were not significantly different.

It is noticeable that the above two results from E1 and E2 groups are similar in that both groups have the same results on four tests showing that the post-test scores were higher than those of the pre-test while one test of the pre-test

scores are higher than those of the post-test, and only one test of the pre- and post-test scores is not significantly different.

Table 4.6 Summary of Wilcoxon test comparing pre- & post-test scores within E2

Test	Post-test > Pre-test	Pre-test > Post-test	Pre-test = Post-test
1 Anger: recall	√, large <i>r</i>		
2 Anger: translation			√
3 Lucy: recall	√, large <i>r</i>		
4 Lucy: translation		√, medium <i>r</i>	
5 Sad: recall	√, large <i>r</i>		
6 Sad: translation	√, medium <i>r</i>		
<p>Note: “√” represents the result of the test.  “<i>r</i>” represents the effect size.</p>			

### C1a

1) For Anger: recall, the reading comprehension of the pre-test was significantly less than that of the post-test ( $Mdn = .50, 1$ ),  $T = 5.50, p < .05$ , with a large effect size ( $r = .64$ ); but for translation, neither test differed significantly ( $Mdn = 4, 5$ ),  $T = 42.50, p < .05, ns$ .

2) For Lucy: recall and translation, neither test differed significantly ( $Mdn = 1.50, 3$ ),  $T = 15, p < .05, ns$ ; ( $Mdn = 11, 12$ ),  $T = 34.50, p < .05, ns$ , respectively).

3) For Sad: recall and translation, neither test differed significantly ( $Mdn = 3.50, 4$ ),  $T = 27, p < .05, ns$ ; ( $Mdn = 15.50, 11$ ),  $T = 39.50, p < .05, ns$ , respectively).

To sum up, out of the 6 tests used to measure whether reading comprehension of 15 participants in control group1 (C1a) improves without exposure to extensive reading (ER), the findings showed that the post-test scores on only one out of six tests (1/6) were significantly higher than those of the pre-test (see the summary Table 4.7 below) whereas, the pre-test and post-test scores on the training tests (5/6) were not significantly different.

Table 4.7 Summary of Wilcoxon test comparing pre- & post-test scores within C1a

<b>Test</b>	<b>Post-test &gt; Pre-test</b>	<b>Pre-test &gt; Post-test</b>	<b>Pre-test = Post-test</b>
1 Anger: recall	√, large <i>r</i>		
2 Anger: translation			√
3 Lucy: recall			√
4 Lucy: translation			√
5 Sad: recall			√
6 Sad: translation			√
<p>Note: “√” represents the result of the test.  “<i>r</i>” represents the effect size.</p>			

## C1b

1) For Anger: recall, the reading comprehension of pre-test was significantly less than that of the post-test ( $Mdn = 1.50, 4$ ),  $T = 58, p < .05$ , with a large effect size ( $r = .52$ ); but for translation, neither test differed significantly ( $Mdm = 7, 8$ ),  $T = 167, p < .05, ns$ .

2) For Lucy: recall, the reading comprehension of pre-test was significantly less than that of the post-test ( $Mdn = 5, 6.50$ ),  $T = 64.50, p < .05$ , with a large effect size ( $r = .52$ ); but for translation, neither test differed significantly ( $Mdm = 18.50, 16.50$ ),  $T = 174.50, p < .05, ns$ .

3) For Sad: recall, the reading comprehension of pre-test ( $Mdm = 4.50$ ) was significantly less than that of the post-test ( $Mdn = 7$ ),  $T = 21, p < .05$ , with a large effect size ( $r = .76$ ); but for translation, neither test differed significantly ( $Mdm = 16, 19$ ),  $T = 144, p < .05, ns$ .

To sum up, out of the 6 tests used to measure whether reading comprehension of 29 participants in control group2 (C1b) improves without exposure to extensive reading (ER), the findings showed that the post-test scores on three out of six tests (3/6) were significantly higher than those of the pre-test (see the summary Table 4.8 below) whereas, the pre-test and post-test scores on the remaining tests (3/6) were not significantly different.

It is noticeable that the last two results from C1a and C1b groups are similar in that both groups have the same results on four out of six tests (4/6), one test showing post-test scores were higher than those of the pre-test, and three tests showing statistically non-significant difference between the pre- and post-test scores. It is of interest regarding the differences in the results of these two groups, that is, for C1b, that the results of 2 tests with the same texts and tasks (Lucy;

recall & Sad: recall) are similar to those of the two experimental groups E1 and E2 as reported earlier. This will be discussed further in the section on discussion of the findings in Chapter 5.

Table 4.8 Summary of Wilcoxon test comparing pre- & post-test scores within C1b

Test	Post-test > Pre-test	Pre-test > Post-test	Pre-test = Post-test
1 Anger: recall	√, large <i>r</i>		
2 Anger: translation			√
3 Lucy: recall	√, large <i>r</i>		
4 Lucy: translation			√
5 Sad: recall	√, large <i>r</i>		
6 Sad: translation			√
<p>Note: “√” represents the result of the test.  “<i>r</i>” represents the effect size.</p>			

To sum up, in a comparison of the reading comprehension pre- and post-test of the four groups, there were twenty-four tests (24) used in the analysis with the alpha level set at the .05 level of significance. The results (see the summary Table 4.8 below) revealed that reading comprehension of the post-test was significantly higher than that of the pre-test in twelve out of twenty-four tests (12/24) and most were written recall protocols tests (10/12). The comprehension scores of the pre-test were higher than those of the post-test in only two out of twenty-four tests (2/24) and both were translation tests. The rest (10/24) showed that the comprehension of both pre- and post-test did not differ significantly and most were in translation tests (8/10). These results, then, suggest that scores tend to increase following the ER intervention.

Table 4.9 Summary of Wilcoxon test comparing pre- & post-test scores within four groups

Test	Post-test > Pre-test				Pre-test > Post-test				Pre-test = Post-test				Total
	E1	E2	C1a	C1b	E1	E2	C1a	C1b	E1	E2	C1a	C1b	
1 Anger: recall	E1	E2	C1a	C1b									4
2 Anger: translation	E1									E2	C1a	C1b	4
3 Lucy: recall	E1	E2		C1b							C1a		4
4 Lucy: translation					E1	E2					C1a	C1b	4
5 Sad: recall	E1	E2		C1b							C1a		4
6 Sad: translation		E2							E1		C1a	C1b	4
	4	4	1	3	1	1	-	-	1	1	5	3	24
Total (Group)	12				2				10				

#### 4.6 Results of Reading Comprehension Post-Test between Six Groups

**Research Question 1:** Is there a significant difference in post-test scores on reading comprehension among the 6 groups consisting of two experimental groups (E1 and E2), two control groups: pre- and post-test (C1a and C1b), and two control groups: post-test only (C2a and C2b)?

The alternative and null alternative hypotheses are:

- $H_1$ : There are differences between the comprehension post-test scores of six tests between six groups.
- $H_0$ : There is no difference between the comprehension post-test scores of six tests between six groups.

The purpose of this analysis (between-subjects experiment which has one post-test scores for each subject) is to see whether reading comprehension of E1 and E2 increased after exposure to ER compared to that of C1a, C1b, C2a and C2b without ER. The Kruskal-Wallis test or  $H$  test for three or more unrelated samples was used in this analysis, as with the preliminary analysis in the first part of this chapter. We used this Kruskal-Wallis  $H$  test to determine if reading comprehension differed between the three conditions of 1) ER, 2) no-treatment control (pre- and post-test) and 3) no-treatment control (post-test only). As described earlier, the Kruskal-Wallis test is the non-parametric alternative to a one-way between-groups analysis of variance or one-way independent ANOVA. It allows us to compare the scores on some continuous variable for three or more

groups. Scores are converted to ranks and the mean rank for each group is compared (Pallant 2007: 226).

A Kruskal-Wallis test (see Table 4.10 below) revealed a statistically significant difference in reading comprehension across six groups at the .05 level of significance. Participants' reading comprehension on five out of six tests (5/6) was significantly affected by the format and the test texts given to them across the six groups. Students number in each group were:

E1,  $n = 46$ ,

E2,  $n = 36$ ,

C1a,  $n = 16$ ,

C1b,  $n = 30$ ,

C2a,  $n = 17$ ,

C2b,  $n = 13$ ),

Anger: recall ( $p < .05$ , Kruskal Wallis  $H = 33.43$ ,  $df = 5$ ),

Anger: translation, ( $p < .05$ , Kruskal Wallis  $H = 17.30$ ,  $df = 5$ ),

Lucy: recall, ( $p < .05$ , Kruskal Wallis  $H = 25.32$ ,  $df = 5$ ),

Sad: recall, ( $p < .05$ , Kruskal Wallis  $H = 33.89$ ,  $df = 5$ ),

Sad: translation, ( $p < .05$ , Kruskal Wallis  $H = 18.43$ ,  $df = 5$ ).

However, one out of six tests (1/6) of comprehension which was not significantly affected was Lucy: translation, ( $p < .05$ , Kruskal Wallis  $H = 7.82$ ,  $df = 5$ , *ns*).



Table 4.10 Kruskal-Wallis *K* test comparing post-test scores of six groups

Group	N	Anger		Lucy		Sad	
		Recall	Translation	Recall	Translation	Recall	Translation
		Mean Rank	Mean Rank	Mean Rank	Mean Rank	Mean Rank	Mean Rank
E1	46	89.37	92.11	97.55	91.88	65.78	91.43
E2	36	100.69	94.58	82.79	73.90	105.47	89.51
C1a	16	59.00	58.50	56.22	60.97	54.66	60.44
C1b	30	83.97	72.17	88.55	82.48	96.43	81.00
C2a	17	58.12	66.35	58.59	80.41	81.76	72.53
C2b	13	28.77	53.08	41.62	65.92	44.65	38.65
Total	158						
<b>Chi-Square</b>		<b>33.428</b>	<b>17.302</b>	<b>25.321</b>	7.815	<b>32.891</b>	<b>18.428</b>
<b>df</b>		5	5	5	5	5	5
<b>Asymp. Sig.</b>		<b>.000*</b>	<b>.004*</b>	<b>.000*</b>	.167	<b>.000*</b>	<b>.002*</b>

\* The difference is significant at .05 level ( $*p < 0.05$ ).

## Post-Hoc Tests

As was mentioned earlier in this chapter in the preliminary analysis, when we obtain a statistically significant result from the Kruskal-Wallis test as we did with a one-way ANOVA, this test tells us only that a difference exists; it does not tell us exactly where the differences lie (Field, 2009: 564). We can find out which of the groups are statistically significantly different from one another by doing post-hoc tests like we did in the preliminary analysis. The post-hoc tests used in this analysis are, again, the Mann-Whitney  $U$  tests between pairs of groups with a Bonferroni correction, that is instead of using .05 as the critical value for significance for each test, we use a critical value of .05 divided by the number of tests we have conducted, to the alpha values to control for Type I error.

Mann-Whitney  $U$  tests (see Table 4.11 below) were used to follow up the above findings from the Kruskal-Wallis  $H$  test. A Bonferroni correction was applied and all effects are reported at a .0083 level of significance ( $p < .0083$ ).

In this analysis, the researcher conducted fifteen Mann-Whitney  $U$  tests for the five pairs of variables by ranking them in ascending order of mean rank before running the Mann-Whitney  $U$  test on adjacent groups. There were five Mann-Whitney  $U$  tests per variable (e.g. Anger: recall), i.e.

- C2a & C2b
- C1a & C2a
- C1a & C1b
- E1 & C1b
- E1 & E2.

The results reveal that that reading comprehension scores on *none* of the thirty tests (30 tests) were significantly different as reported in detail below:

1. Anger: recall between C2a & C2b ( $U = 60.50$ ), *ns*  
C1a & C2a ( $U = 134$ ), *ns*  
C1a & C1b ( $U = 143$ ), *ns*  
E1 & C1b ( $U = 623.50$ ), *ns*  
E1 & E2 ( $U = 748.50$ ), *ns*.
2. Anger: translation between C1a & C1b ( $U = 98.50$ ), *ns*  
C1a & C2a ( $U = 118$ ), *ns*  
C1b & C2a ( $U = 229.50$ ), *ns*  
E1 & C1b ( $U = 507.50$ ), *ns*  
E1 & E2 ( $U = 812.50$ ), *ns*.
3. Lucy: recall between C1a & C2b ( $U = 82$ ), *ns*  
C1a & C2a ( $U = 130$ ), *ns*  
E2 & C2a ( $U = 186.50$ ), *ns*  
E2 & C1b ( $U = 494.50$ ),  
E1 & C1b ( $U = 602$ ), *ns*.
4. Lucy: translation between C1a & C2b ( $U = 96$ ), *ns*  
E2 & C2b ( $U = 208$ ), *ns*  
E2 & C2a ( $U = 193$ ), *ns*  
C1b & C2a ( $U = 254$ ), *ns*  
E1 & C1b ( $U = 599$ ), *ns*.
5. Sad: recall between C1a & C2b ( $U = 92.50$ ), *ns*  
E1 & C1a ( $U = 289$ ), *ns*  
E1 & C2a ( $U = 309.50$ ), *ns*

C1b & C2a ( $U = 206$ ), *ns*

E2 & C1b ( $U = 444.50$ ), *ns*.

6. Sad: translation between C1a & C2b ( $U = 71$ ), *ns*

C1a & C2a ( $U = 110.50$ ), *ns*

C1b & C2a ( $U = 217$ ), *ns*

E2 & C1b ( $U = 461.50$ ), *ns*

E1 & E2 ( $U = 777.50$ ), *ns*.

To sum up the results from the analysis of the post-test scores of six tests on reading comprehension between the six groups, the first test, the Kruskal-Wallis test, showed they were statistically significantly different at the significance level of .0083 in five out of the six tests. The post-hoc Mann-Whitney  $U$  tests used to follow-up the first findings indicated that *none* of the thirty tests across the six groups were significantly different. That is to say, based on the statistical tests, no differences were found between the six student groups in relation to the comprehension post-test scores. To put it more simply, these tests revealed that none of the six student groups differed significantly in their scores for reading comprehension on post-test scores. However, there are differences, and these can be seen from point-by-point comparison on SPSS scores as shown in Table 4.11.

Table 4.11 Post-hoc Mann-Whitney *U*-test comparing post-test scores on thirty group differences

**1 Anger Recall**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	
C2a	17	18.44	313.50	C1a	16	17.13	274.00	C1a	16	17.44	279.00	E1	46	39.95	1837.50	
C2b	13	11.65	151.50	C2a	17	16.88	287.00	C1b	30	26.73	802.00	C1b	30	36.28	1088.50	
Total	30			Total	33			Total	46			Total	76			
Mann-Whitney U			60.500	Mann-Whitney U			134.000	Mann-Whitney U			143.000	Mann-Whitney U			623.500	
Z			-2.162	Z			-0.073	Z			-2.256	Z			-0.712	
Asymp. Sig. (2-tailed)			.031	Asymp. Sig. (2-tailed)			.942	Asymp. Sig. (2-tailed)			.024	Asymp. Sig. (2-tailed)			.476	
																748.500
																-0.751
																.453

**2 Anger Translation**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	
C1a	16	15.34	245.50	C1a	16	15.88	245.00	C1b	30	24.85	745.50	E1	46	42.47	1953.50	
C2b	13	14.58	189.50	C2a	17	18.60	307.00	C2a	17	22.50	382.50	C1b	30	32.42	972.50	
Total	29			Total	33			Total	47			Total	76			
Mann-Whitney U			98.500	Mann-Whitney U			118.000	Mann-Whitney U			229.500	Mann-Whitney U			507.500	
Z			-0.242	Z			-0.650	Z			-0.566	Z			-1.941	
Asymp. Sig. (2-tailed)			.809	Asymp. Sig. (2-tailed)			.516	Asymp. Sig. (2-tailed)			.517	Asymp. Sig. (2-tailed)			.052	
																812.500
																-0.145
																.885

**3 Lucy Recall**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	
C1a	16	16.38	262.00	C1a	16	16.63	266.00	E2	36	30.32	1091.50	E2	36	32.24	1160.50	
C2b	13	13.31	173.00	C2a	17	17.35	295.00	C2a	17	19.97	339.50	C1b	30	35.02	1050.50	
Total	29			Total	33			Total	53			Total	66			
Mann-Whitney U			82.000	Mann-Whitney U			130.000	Mann-Whitney U			186.500	Mann-Whitney U			494.500	
Z			-0.977	Z			-0.218	Z			-2.290	Z			-0.589	
Asymp. Sig. (2-tailed)			.329	Asymp. Sig. (2-tailed)			.827	Asymp. Sig. (2-tailed)			.022	Asymp. Sig. (2-tailed)			.556	
																602.000
																-0.942
																.346

The difference is significant at .0083 level (\* $p < 0.0083$ ).

Table 4.11 Post-hoc Mann-Whitney *U*-test comparing post-test scores on thirty group differences (continued)

**4 Lucy Translation**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks
C1a	16	14.50	232.00	E2	36	25.72	926.00	E2	36	30.14	1085.00	C1b	30	23.97	719.00
C2b	13	15.62	203.00	C2b	13	23.00	299.00	C2a	17	20.35	346.00	C2a	17	24.06	409.00
Total	29			Total	49			Total	53			Total	47		
Mann-Whitney U			96.000	Mann-Whitney U			208.000	Mann-Whitney U			193.000	Mann-Whitney U			254.000
Z			-0.351	Z			-0.589	Z			-2.156	Z			-0.022
Asymp. Sig. (2-tailed)			.725	Asymp. Sig. (2-tailed)			.556	Asymp. Sig. (2-tailed)			.031	Asymp. Sig. (2-tailed)			.982

**5 Sad Recall**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks
C1a	16	15.72	251.50	E1	46	33.21	1527.50	E1	46	30.23	1390.50	C1b	30	25.63	769.00
C2b	13	14.12	183.50	C1a	16	26.59	425.50	C2a	17	36.79	625.50	C2a	17	21.12	359.00
Total	29			Total	62			Total	63			Total	47		
Mann-Whitney U			92.500	Mann-Whitney U			289.500	Mann-Whitney U			309.500	Mann-Whitney U			206.000
Z			-0.507	Z			-1.268	Z			-1.271	Z			-1.127
Asymp. Sig. (2-tailed)			.612	Asymp. Sig. (2-tailed)			.205	Asymp. Sig. (2-tailed)			.204	Asymp. Sig. (2-tailed)			.260

**6 Sad Translation**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks
C1a	16	17.06	273.00	C1a	16	15.41	246.50	C1b	30	25.27	758.00	E2	36	35.68	1284.50
C2b	13	12.46	162.00	C2a	17	18.50	314.50	C2a	17	21.76	370.00	C1b	30	30.88	926.50
Total	29			Total	33			Total	47			Total	66		
Mann-Whitney U			71.000	Mann-Whitney U			110.500	Mann-Whitney U			217.000	Mann-Whitney U			461.500
Z			-1.448	Z			-0.919	Z			-0.843	Z			-1.012
Asymp. Sig. (2-tailed)			.148	Asymp. Sig. (2-tailed)			.358	Asymp. Sig. (2-tailed)			.399	Asymp. Sig. (2-tailed)			.311

The difference is significant at .0083 level ( $*p < 0.0083$ ).

#### 4.7 Results of Reading Fluency between Six Groups

**Research Question 2:** Is there a significant difference in reading fluency scores of word per minute (wpm) from three series of tests (Time 1, Time 2, Time 3) between 6 groups consisting of 2 experimental groups (E1 and E2), 2 control groups: pre- and post-test (C1a & C1b), and 2 control groups: post-test only (C2a and C2b)?

From the research question, we can generate the following alternative and null hypotheses:

- $H_1$ : There are differences between the word-per-minute (wpm) fluency scores from three series of tests (Times 1, 2, 3) between the 6 groups.
- $H_0$ : There are no differences between word-per-minute (wpm) fluency scores from three series of tests (Times 1, 2, 3) between the 6 groups.

The purpose of this analysis (between-subjects experiment with one posttest score for each subject) is to see whether the reading fluency of the two experimental groups increased after exposure to ER compared to that of the four control groups without ER. In this analysis, the Kruskal-Wallis  $H$  test and the Mann-Whitney  $U$  tests were used as the same procedure respectively again together with the Bonferroni adjustment to the alpha when conducting multiple tests of the Mann-Whitney  $U$  tests. As mentioned before, the Kruskal-Wallis  $H$  test was used first to see whether there is a difference between six groups of students' wpm scores on three series of fluency tests. After the Kruskal-Wallis  $H$  test was run and the results showed there are at least some statistically significant differences between the six groups, the Mann-Whitney  $U$  tests were used as

follow-up post hoc tests to examine what the specific differences might be. In this analysis, the researcher conducted fifteen Mann-Whitney *U* tests for the five pairs of variables by means of ranking in ascending order of mean rank before running the Mann-Whitney *U* test on adjacent groups. There were five Mann-Whitney *U* tests per variable (e.g. Time 1), i.e.

- C1b & C2b
- C1a & C1b
- C1a & C2a
- C2a & E1
- E1 & E2.

A Kruskal-Wallis test (see Table 4.12 below) revealed a statistically significant difference in all of the three series of wpm scores on reading fluency across six groups at the significance level of .05. This means that ER has a positive effect in reading fluency improvement. Participants' reading fluency time measure as wpm in three time series (Times 1, 2, 3) consisting of four tests in each series, was significantly different across the six groups, each group comprising the following number of students:

E1,  $n = 40$ ,

E2,  $n = 33$ ,

C1a,  $n = 33$ ,

C1b,  $n = 34$ ,

C2a,  $n = 23$ ,

C2b,  $n = 30$ ),

Time 1 ( $p < .05$ , Kruskal Wallis  $H = 121.40$ ,  $df = 5$ ),

Time 2 ( $p < .05$ , Kruskal-Wallis  $H = 128.19$ ,  $df = 5$ ,

Time 3 ( $p < .05$ , Kruskal-Wallis  $H = 119.21$ ,  $df = 5$ ).



Table 4.12 Kruskal-Wallis *K*-test comparing 3 time series of wpm scores of the six groups

Group	N	Time 1 (T4 – T7)	Time 2 (T8 – T11)	Time 3 (T12 – T15)
		Mean Rank	Mean Rank	Mean Rank
E1	40	58.68	61.88	61.30
E2	33	23.15	20.48	24.03
C1a	33	119.85	106.03	114.39
C1b	34	130.06	132.03	121.44
C2a	23	127.74	139.30	133.65
C2b	30	143.17	145.93	149.93
Total	193			
<b>Chi-Square</b>		<b>121.397</b>	<b>128.185</b>	<b>119.206</b>
<b>df</b>		<b>5</b>	<b>5</b>	<b>5</b>
<b>Asymp. Sig.</b>		<b>.000*</b>	<b>.000*</b>	<b>.000*</b>
The difference is significant at the .05 level (* $p < 0.05$ ).				

### Post-Hoc Tests

In these tests, we will use the same procedure as in the preliminary analysis and in the previous analysis of reading comprehension test. Mann-Whitney U tests (see Table 4.13 below) were used again to follow-up the above findings from the Kruskal-Wallis H test. A Bonferroni correction was applied at a .0083 level of significance ( $p < .0083$ ).

Table 4.13 gives the results of the post-hoc Mann-Whitney tests comparing word per minute (wpm) on group differences. It showed that the wpm score of eight out of fifteen pairs (8/15) of the participant group scores were significantly different with a medium to large effect size (from  $r = .31$  to  $r = .73$ ). In Time 1, wpm scores of two out of five pairs (2/5), i.e. C1a & E1 and E1 & E2 were significantly different with a large effect size (.68, .66). In time 2, wpm

scores of three out of five pairs (3/5), i.e. C1a & C1b, C1a & E1 and E1 & E2 were significantly different with a medium effect size in the first pair (.31) and a large effect size in the last two pairs (.58, .73). In Time 3, wpm scores of three out of five pairs (3/5), i.e C1a & C1b, C1a & E1, E1 & E2 were significantly different with a medium effect size in the first pair (.46) and a large effect size in the last two pairs (.60, .63). The details are as follows:

1. Time 1 (T4 – T7) between C1b & C2b ( $U = 409, ns$ ),
  - C2a & C1b ( $U = 347, ns$ ),
  - C1a & C2a ( $U = 323, ns$ ),
  - C1a & E1 ( $U = 139, r = .68$ ),
  - E1 & E2 ( $U = 155, r = .66$ ).
2. Time 2 (T8 – T11) between C2a & C2b ( $U = 285, ns$ ),
  - C1b & C2a ( $U = 368, ns$ ),
  - C1a & C1b ( $U = 356, r = .31$ ),
  - C1a & E1 ( $U = 210, r = .58$ ),
  - E1 & E2 ( $U = 97, r = .73$ ).
3. Time 3 (T12 – T15) between C2a & C2b ( $U = 233, ns$ ),
  - C2a & C1b ( $U = 342, ns$ ),
  - C1a & C1b ( $U = 502, r = .50$ ),
  - C1a & E1 ( $U = 196, r = .60$ ),
  - E1 & E2 ( $U = 171, r = .63$ ).

Table 4.13 Post-hoc Mann-Whitney *U*-test comparing wpm scores on fifteen group differences

**Time 1 (T4 - T7)**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	
C1b	34	29.53	1004.00	C2a	23	27.09	623.00	C1a	33	26.79	884.00	C1a	33	52.79	1742.00	
C2b	30	35.87	1076.00	C1b	34	30.29	1030.00	C2a	23	30.96	712.00	E1	40	23.98	959.00	
Total	64			Total	57			Total	56			Total	73			
Mann-Whitney U			409.000	Mann-Whitney U			347.000	Mann-Whitney U			323.000	Mann-Whitney U			139.000	
Z			-1.359	Z			-.717	Z			.941	Z			-5.775	
Asymp. Sig. (2-tailed)			.174	Asymp. Sig. (2-tailed)			.474	Asymp. Sig. (2-tailed)			.347	Asymp. Sig. (2-tailed)			.000*	
												Effect Size			.676	
																.655

**Time 2 (T8 - T11)**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	
C2a	23	24.39	561.00	C1b	34	28.32	963.00	C1a	33	27.79	917.00	C1a	33	50.64	1671.00	
C2b	30	29.00	870.00	C2a	23	30.00	690.00	C1b	34	40.03	1361.00	E1	40	25.75	1030.00	
Total	53			Total	57			Total	67			Total	73			
Mann-Whitney U			285.000	Mann-Whitney U			368.000	Mann-Whitney U			356.000	Mann-Whitney U			210.000	
Z			-1.077	Z			.374	Z			-2.571	Z			-4.988	
Asymp. Sig. (2-tailed)			.282	Asymp. Sig. (2-tailed)			.708	Asymp. Sig. (2-tailed)			.010*	Asymp. Sig. (2-tailed)			.000*	
												Effect Size			.584	
																.730

**Time 3 (T12 - T15)**

Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	Group	N	Mean Rank	Sum of Ranks	
C2a	23	22.13	509.00	C2a	23	31.13	716.00	C1a	33	32.21	1063.00	C1a	33	51.06	1685.00	
C2b	30	30.73	922.00	C1b	34	27.56	937.00	C1b	34	35.74	1215.00	E1	40	25.40	1016.00	
Total	53			Total	57			Total	67			Total	73			
Mann-Whitney U			233.000	Mann-Whitney U			342.000	Mann-Whitney U			502.000	Mann-Whitney U			196.000	
Z			-2.01	Z			-.797	Z			-.740	Z			-5.143	
Asymp. Sig. (2-tailed)			.044	Asymp. Sig. (2-tailed)			.425	Asymp. Sig. (2-tailed)			.459	Asymp. Sig. (2-tailed)			.000*	
												Effect Size			.602	
																.634

The difference is significant at the .0083 level (\**p* < .0083).

To sum up, reading fluency was measured by using time, i.e. word per minute (wpm) from three time series (Times 1, 2, 3) containing four timed-reading comprehension tests with eight multiple-choice questions in each. The results, as illustrated in the summary Table 4.14 below, revealed that wpm scores in eight out of fifteen pairs (8/15) were significantly different. Of the eight pairs, three (3/8) were the pairs between the two experimental groups themselves (E1 & E2). The other five pairs (5/8) consisted of three pairs between one control group (C1a) and one experimental group (E1). The remaining two pairs that were significantly different in time were the pairs between the control groups (C1a & C1b).

Consequently, according to the research question regarding the effects of ER on reading fluency improvement, from the results of this analysis, it can be concluded that the reading fluency of the students who were exposed to ER increased compared to those who were not exposed to ER. This is based on the strong evidence that in every time series (Times 1, 2, 3), there was a significant difference in wpm scores with a large effect size between an control group (C1a) and the experimental group (E1):

- C1a & E1 in Time 1,
- C1a & E1 in Time 2,
- C1a & E1 in Time 3.

The overall results are illustrated briefly in Table 4.14 below, which was already reported as a summary of the results from the pos-hoc Mann-Whitney test comparing wpm of reading fluency on the fifteen group differences. Discussion of the findings is provided in Chapter 5.

Table 4.14 Summary of pos-hoc Mann-Whitney *U* test comparing 3 time series of wpm scores on fifteen group differences

Time 1 (T4-T7)	Group	Group	Group	Group	Group
	C1b	C2a	C1a	C1a	E1
	C2b	C1b	C2a	E1	E2
Result	ns	ns	ns	√, large <i>r</i>	√, large <i>r</i>
Time 2 (T8-T11)	C2a	C1b	C1a	C1a	E1
	C2b	C2a	C1b	E1	E2
	Result	ns	ns	√, medium <i>r</i>	√, large <i>r</i>
Time 3 (T12-T15)	C2a	C2a	C1a	C1a	E1
	C2b	C1b	C1b	E1	E2
	Result	√, small <i>r</i>	ns	ns	√, large <i>r</i>
<p>Note: "ns" represents non-significant difference.  "√" represents significant difference.  "<i>r</i>" represents effect size.</p>					

#### **4.8 Results regarding Attitudes toward Extensive Reading (ER)**

This section examines the students' attitudes toward ER by analyzing the attitude questionnaire administered at the end of this experimental study. In this presentation of the results, the quantitative descriptive data is presented first, followed by the qualitative data from the in-depth interviews in order to gain more information on the students' feeling about ER.

**Research Question 3:** Do the students in the two experimental groups: E1 and E2 hold positive or negative attitudes toward Extensive Reading (ER) after exposure to ER?

The purpose of this questionnaire analysis is to see whether the two experimental groups, E1 and E2, have positive attitudes toward ER at the end of the experiment. In this analysis, the questionnaire was analyzed on the basis of a survey which contains 13 items to measure students' attitudes. Participants were asked to rate each item from 'strongly disagree' which equals 1 point, 'disagree' for 2 points, 'neutral' for 3 points, 'agree' for 4 points and 'strongly agree' for 5 points (see Appendix I). Ratings were counted of how many individuals fall into each category and then calculated as a percentage of a total number of units in both of the ER groups.

The responses of the survey given to the two groups of students, 95 in total, consisting of 49 individuals in the E1 group and 46 individuals in the E2 were combined and calculated to produce descriptive percentage. The findings as shown in Table 4.15 below indicate that overall, the majority of the participants

had positive attitudes towards ER. Further details will be presented in the following.

Table 4.15 Frequency of students' attitudes toward ER

Item	Statement (N = 95)	1	2	3	4	5	Total	
		% strongly disagree (Frequency)	% disagree (Frequency)	% neutral (Frequency)	% agree (Frequency)	% strongly agree (Frequency)		% missing (Frequency)
<b>The experience I received in reading graded readers:</b>								
1	helped me improve reading skills.	0.0 (0)	1.1 (1)	32.6 (31)	<b>44.2 (42)</b>	21.1 (20)	1.1 (1)	100
2	helped me read English for general information and detail.	1.1 (1)	2.1 (2)	40.0 (38)	<b>47.4 (45)</b>	8.4 (8)	1.1 (1)	100
3	helped me read English for enjoyment.	1.1 (1)	6.3 (6)	35.8 (34)	<b>49.5 (47)</b>	7.5 (7)	0.0 (0)	100
4	made me want to read graded readers more.	1.1 (1)	8.4 (8)	41.1 (39)	<b>43.2 (41)</b>	5.3 (5)	1.1 (1)	100
5	helped me learn to read fast.	1.1 (1)	2.1 (2)	<b>56.8 (54)</b>	35.8 (34)	4.2 (4)	0.0 (0)	100
6	helped me find subordinate ideas in the reading.	1.1 (1)	8.4 (8)	<b>60.0 (57)</b>	28.4 (27)	2.1 (2)	0.0 (0)	100
7	helped me find main ideas in the reading.	1.1 (1)	5.3 (5)	<b>50.5 (48)</b>	38.9 (37)	4.2 (4)	0.0 (0)	100
8	helped me bring out my prior knowledge into reading comprehension.	1.1 (1)	2.1 (2)	<b>46.3 (44)</b>	44.2 (42)	6.3 (6)	0.0 (0)	100
9	helped me gain more knowledge of reading methods than I had thought.	1.1 (1)	2.1 (2)	42.1 (40)	<b>46.3 (44)</b>	8.4 (8)	0.0 (0)	100
10	was an interesting experience.	1.1 (1)	5.3 (5)	34.7 (33)	<b>38.9 (37)</b>	18.9 (18)	1.1 (1)	100
11	made me want to take this experience again.	1.1 (1)	8.4 (8)	38.9 (37)	<b>41.1 (39)</b>	10.5 (10)	0.0 (0)	100
12	was effective.	1.1 (1)	3.2 (3)	31.2 (29)	<b>48.4 (45)</b>	16.1 (15)	0.0 (0)	100
13	helped me apply what I have learned (grammar, reading strategies) into real practice (by reading).	2.1 (2)	4.2 (4)	<b>42.1 (40)</b>	40.0 (38)	11.6 (11)	0.0 (0)	100



Regarding the 13-item questionnaire mentioned above, the first draft of this questionnaire containing 23 items had been trialled with 50 students showing a Cronbach Alpha reliability of .907, which is excellent. The second, a revised version containing 13 items, was also trialled with 49 students; the Cronbach Alpha reliability being .925, which is also excellent. The internal consistency and reliability of the current questionnaire was also measured by the Cronbach Alpha coefficient, giving a result of .782, which is good (Dörnyei 2003: 112) due to the small number of items, i.e. 13. Let us now look at the results of this analysis.

To assess student attitudes toward ER, the questionnaire content focuses on two aspects, one pertaining to the improvement in reading skills as an effect of ER (items 1, 2, 5, 6, 7, 8, 9, 13), and the other pertaining to student feelings about ER (items 3, 4, 10, 11, 12). Scales of this type are called multi-item scales. They involve a cluster of several differently worded items that focus on the same target (Dörnyei 2003: 33). The results of the similar questions revealed that most of the responses in the former group, i.e. five of eight (5/8) were moderately positive ('neutral' is coded as part of positive), whereas all of the responses (5/5) in the latter group revealed positive attitudes toward ER ('agree').

With reference to the proportion of responses for 'agree' and 'neutral', most students' responded 'agree' to eight out of thirteen (8/13) items. When combining 'agree' with 'strongly agree', all but one of the responses is between 50 to 65 % for such items as 'reading graded readers' '1) helped me improve reading skills, 2) read English for general information and detail and 3) for enjoyment, 9) gain more knowledge of reading methods than I had thought, 10) was an interesting experience, 11) made me want to take this experience again and 12) was effective. The only item containing around 49 % is item 4) '... made me

want to read graded readers more'. However, this item is still positive (41.1% for 'neutral') since it is one of the five moderately positive responses.

Taken together, the results show that students participating in the ER programme held a positive attitude toward ER. This will be discussed further in chapter five. The next section deals with the additional data from an in-depth interview about attitudes toward ER.

#### **4.9 Results of Individual Interviews**

The purpose of the individual interview was to learn more about the students' attitudes toward ER, to further investigate the students' opinions on the ER programme, and to check the number of books the students had selected, read and understood (see Figures 4.1 – 4.3 and Tables 4.16 – 4.17). This study utilized structured interviews to clarify issues related to the subject under investigation (Bryman 2004). The interviews were conducted by the researcher on a one-to-one and in-depth basis at the end of the programme with fifty-eight (59%) out of 102 students (56 female and 2 male students) from the two experimental groups. All the interviewees volunteered to give their views. Each interview took approximately 15 to 20 minutes. All of the interviewees agreed to have their interviews recorded using digital recording while the researcher took some notes during the interviews.

The interviews were transcribed and used to supplement the interpretation of the results of the questionnaire data due to the main purpose of the interview, that is to avoid the disadvantages of self-completion questionnaires, to improve the validity and reliability of the primary data collected through the written questionnaires, and to obtain more accurate and precise information regarding the topic under investigation. The main advantage of interviews is that they allow for in-depth clarification and permit the asking of further complex and follow-up questions, which is not possible in a written questionnaire (Hussey and Hussey 1997). Therefore, otherwise unavailable data were obtained based on the interview questions which were mainly focused on (1) the number of graded readers students had selected, read, and understood, (2) reasons for not finishing reading, and (3) opinions about ER as well as its integration into English courses.

The interviewee was individually asked seven questions (see Appendix K1). The findings of Question 1 are presented in the form of bar graph comparisons of the number of books the interviewees had selected, read, and understood, using the mode score, the most frequently occurring score in a set of data to represent the average score. The remainder of the results are detailed in turn as follows.

### **Interview Question 1: ‘How many books have you selected?’**

This question is designed to obtain an answer about the books, graded readers, students had selected during the fifteen weeks of the experiment excluding two weeks for the midterm and final examination.

The result is presented graphically in Figure 4.1 as shown on the following page. More details are given in Table 4.15 that follows showing that fifteen (40%) out of fifty-eight students selected 15 books and twenty-one (36%) students selected about 12 books. The minimum is 5; the maximum is 18 books. The result of 15 books is due to the reading target of this ER programme, that is the students were required to read at least one book per week as recommended by Day and Bamford (1998) who suggest that the students should be required to read a certain number of books rather than be told to read as many as possible. Thus, an overall target for the study was 15 books. The result of 12 books is possibly due to the fact that the students attended classes for 12 weeks. The excluded three weeks are those two weeks when the students prepared and studied for the midterm and final examination as well as submission of assignments. Another week which was excluded was an extraordinary week for the celebration of the coming New Year 2009 in Thailand. Given that New Year’s Eve, 31<sup>st</sup> December 2008, was on

Wednesday and the next day, New Year's day, 1<sup>st</sup> January 2009, was on Thursday, the Thai government announced that Friday 2<sup>nd</sup> January 2009 would be an official holiday as a special gift to the Thai people. This thus caused an especially long holiday (almost one week).

The reasons why interviewees sometimes did not finish reading the graded readers will be explored later in the section of Question 4.

Figure 4.1 Number of books selected

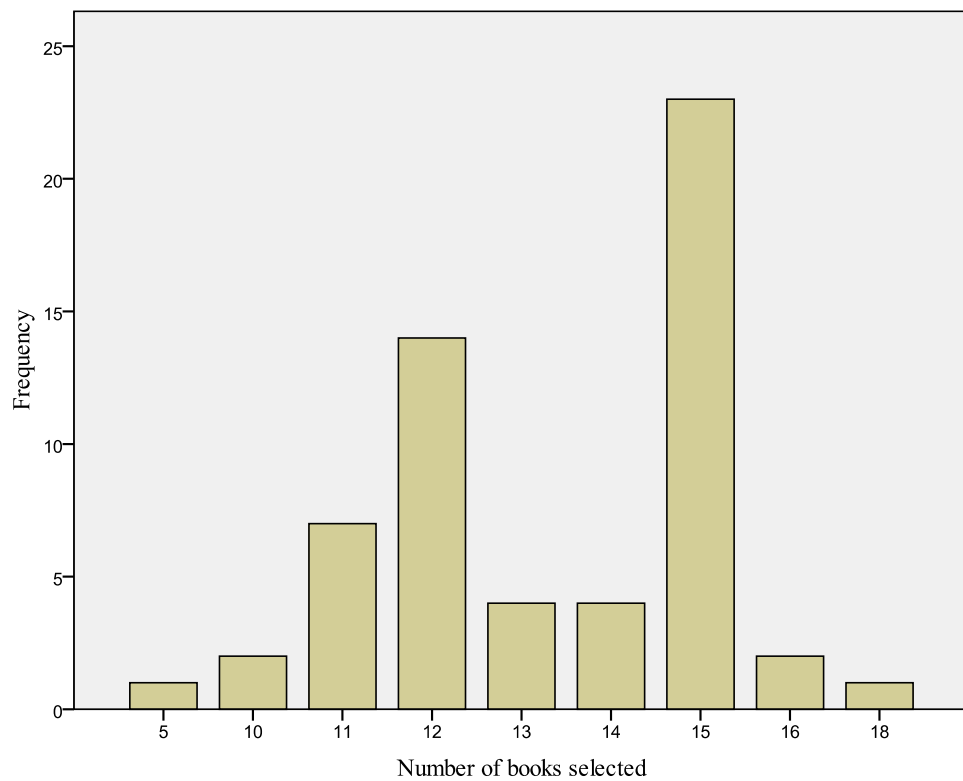


Table 4.16 Number and percent of books selected

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	1	1.72	1.72	1.72
	10	2	3.45	3.45	5.17
	11	7	12.07	12.07	17.24
	<b>12</b>	<b>14</b>	24.14	<b>24.14</b>	41.38
	13	4	6.9	6.9	48.28
	14	4	6.9	6.9	55.17
	<b>15</b>	<b>23</b>	39.66	<b>39.66</b>	94.83
	16	2	3.45	3.45	98.28
	18	1	1.72	1.72	100
Total		58	100	100	

**Interview Question 2: ‘How many books have you finished reading?’**

This question is designed to probe the number of books the interviewees actually finished reading in terms of whole books, not merely thumbing through the pages of them. The result shows in Figure 4.2 that the average number of books the interviewees read is 5 books while the second most is 4 during the period of fifteen weeks. More details are presented in Table 4.16 showing that nine (16%) out of fifty-eight interviewees finished reading 5 books as an average of the 16 books reported as having been read. The minimum is 0; the maximum is 16 books. Most of the interviewees answered that they had finished reading the books during the early stage of the programme since they had more free time and they felt very active with this new experience, i.e. reading graded readers is very challenging. They had never read long story books before. At first most thought that they would never finish the books. In the end, they found that they could.

However, the unfinished reading happened later on when they had more work to do with their study as well as some extra activities at the university. These left them exhausted in the middle and the last stages of the ER programme.

Figure 4.2 Number of books read

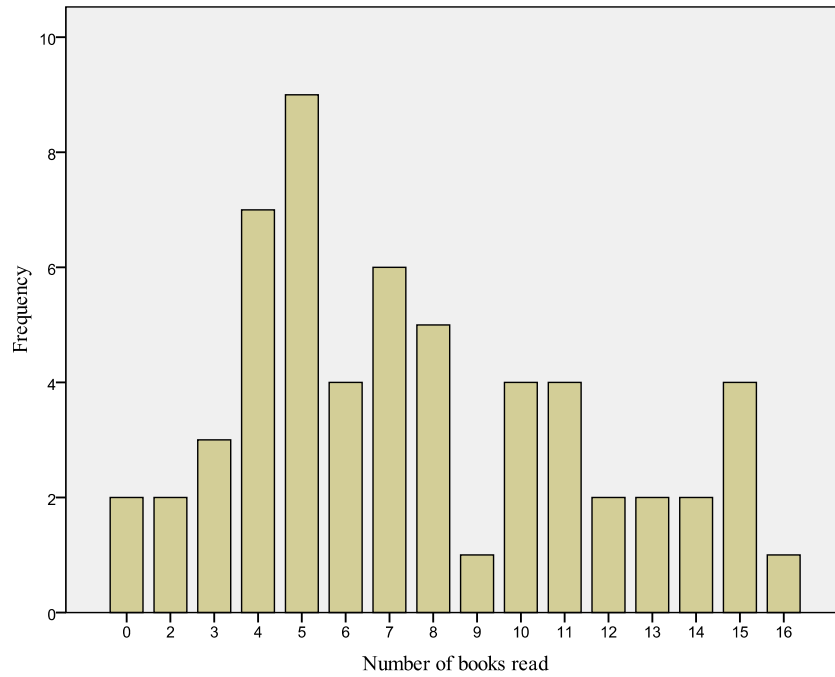


Table 4.17 Number and percent of books read

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	3.4	3.4	3.4
	2	2	3.4	3.4	6.9
	3	3	5.2	5.2	12.1
	4	7	12.1	<b>12.1</b>	24.1
	5	9	15.5	<b>15.5</b>	39.7
	6	4	6.9	6.9	46.6
	7	6	10.3	10.3	56.9
	8	5	8.6	8.6	65.5
	9	1	1.7	1.7	67.2
	10	4	6.9	6.9	74.1
	11	4	6.9	6.9	81.0
	12	2	3.4	3.4	84.5
	13	2	3.4	3.4	87.9
	14	2	3.4	3.4	91.4
	15	4	6.9	6.9	98.3
	16	1	1.7	1.7	100.0
	Total	58	100.0	100.0	



### **Interview Question 3: ‘How many books have you understood?’**

This question was designed to find out the actual reading activity students did on their own with regard to their exposure to ER. In the analysis of Question 3, due to the results of interview Question 2 showing that there were two students who had not finished reading any of the books, their data were not included here.

The results from Figure 4.3 and Table 4.18 show that the average number of books that the interviewees understood is three as reported by thirteen (23%) out of fifty-eight interviewees. The next most common average number is 5 as reported by eleven interviewees (20%). The minimum is 1; the maximum is 12 books.

Some examples of the interview answers are quoted below.

*S4 ‘I had selected 13 books, but could finish eight. Overall, I understood 5. The remaining three are too difficult to understand because they are level 3 which consist of difficult vocabulary items and complicated contents. I then didn’t read the whole books but read only the covers at the back. I usually tried to finish each book before start reading the new one. When doing something, if I do not achieve, I don’t want to let it pass. I keep on doing as best as I can.’*

*S15 ‘I had chosen 12 books but finished 4 at the beginning of the programme. I could understand 3 of them. Later I felt lazy and also had lots of homework. I was not able to manage my time. ER is very useful for it helps me improve my English and get discipline for doing my work.’*

*S43 ‘I had chosen 14 books, and finished only 5. I understood 3 books because I enjoyed them. This made me want to read. I didn’t finished reading for I didn’t understand the stories and felt lazy. It’s not because of the time but because of me. I don’t like English.’*

Figure 4.3 Number of books understood

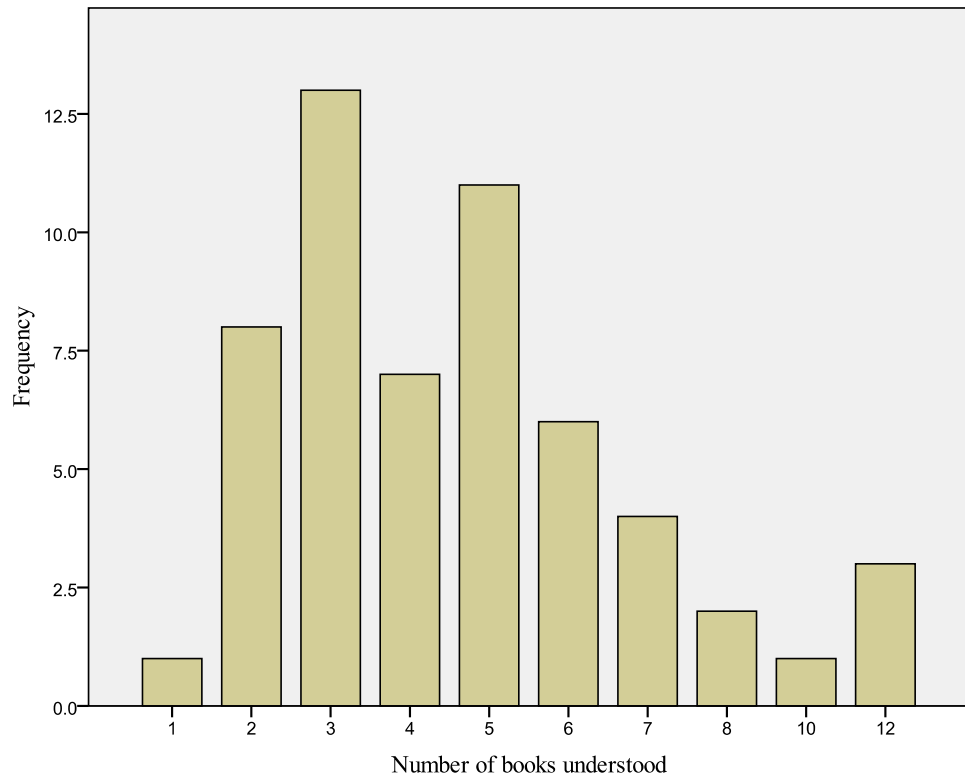


Table 4.18 Number and percent of books understood

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.7	1.8	1.8
	2	8	13.8	14.3	16.1
	3	13	22.4	23.2	39.3
	4	7	12.1	12.5	51.8
	5	11	19.0	19.6	71.4
	6	6	10.3	10.7	82.1
	7	4	6.9	7.1	89.3
	8	2	3.4	3.6	92.9
	10	1	1.7	1.8	94.6
	12	3	5.2	5.4	100.0
	Total	56	96.6	100.0	
Missing	System	2	3.4		
Total		58	100.0		

#### **Interview Question 4: ‘Why have you not finished reading?’**

Students were asked an open-ended question about why they had not finished the graded readers they had selected. Since students often gave more than one reason for not having finished reading, their responses were able to be grouped into more than one answer as listed below. The most frequent answered reason was lack of time due to studies. The second most frequent reason was lack of time in general. The third most frequent was that the books were too difficult to understand. Lastly, the fourth most frequent reason was no desire to read in English.

Reasons why students did not finish reading the graded readers are listed below, followed by some samples of typical answers in turn.

1) Lack of time due to studies (50%)

- *S2 ‘I had no time due to lots of homework.’*
- *S8 ‘I had to do my reports.’*

2) Lack of time in general (30%)

- *S1 ‘I have no time because I stay at home. I have to travel from home to the university.’*
- *S18 ‘I had to work part time’.*
- *S4 ‘I had to join the club.’*

3) Preference for doing other kinds of activities (10%)

- *S2 ‘I want to watch movies and TV.’*
- *S33 ‘I like chatting online.’*
- *S44 ‘I prefer playing computer games to reading.’*
- *S15 ‘I’m too lazy to read; I want to do some other things.’*

4) Other issues related to reading and the books (5%)

- *S16 ‘The time for reading is too short and the book is very long.’*
- *S44 ‘I like reading books with pictures more than the graded readers.’*
- *S11 ‘I like reading cartoon books more than the graded readers.’*
- *S17 ‘If I stopped, I would have to start reading again.’*

### Interview Question 5: ‘Do you think ER is useful for you? In what way?’

Students were asked the yes/no question “Do you think ER is useful for you?” All of the fifty-eight students (100%) answered ‘yes’. Then they were asked an open-ended question “In what way is ER useful?” An analysis of responses generated five response categories as listed below, followed by a sample of typical answers including some quotes from the interviews. The most frequent responses were categorized as vocabulary improvement. The next most frequent set of answers related to an improvement in reading comprehension and reading skills, followed by being more interested in reading, feeling more self-confident when reading English, and lastly, other personal improvements.

Frequent answers about the usefulness of ER are listed below.

#### 1) Vocabulary improvement (25%)

- S34 *‘I’ve got new words that I never know before.’*
- S8 *‘I know more vocabulary because after reading I looked up the unknown words that I really wanted to know in the dictionary. It made me know more words.’*

*S7 ‘ER made me know more vocabulary. I was not happy if I didn’t know the meanings of unknown words. After looking up the words in the dictionary, I could remember them since then.’*

#### 2) Reading skills improvement (22%)

- S30 *‘ER made me practice reading skills.’*
- S27 *‘ER made me enable to understand the story more.’*

*S6 ‘I like reading. ER helps me practice reading skills. It makes me know more. I learn good ideas from the stories. Every novel teaches us.’*

*S22 ‘ER is useful for practicing reading skills. Reading is fun when I understand the stories, I keep on reading.’*

*S25 ‘ER made me gain more words and more understanding from the texts. It made me realize that although there were some sentences I didn’t understand, I could understand the stories because of my imagination.’*

3) Increased interest in reading (20%)

- S15 *'I enjoyed reading English more.'*
- S54 *'I'd like to read more for it's fun and not difficult.'*
  
- S9 *'ER encourages me to read. I can choose my own books and read on my own. I have read 5 books but was able to finish 4. I liked one of them because I could understand the story which is very similar to my own life.'*

4) Increased self-confidence in reading English (18%)

- S52 *'I had more confidence in reading English.'*
- S29 *'ER inspired my confidence in reading longer texts.'*
  
- S56 *'At first I didn't like to read but when I read the graded readers which were novels, I found that I could read and enjoyed them. I'm very proud and felt more confident in reading English.'*

5) Other personal improvements (15%)

- S5 *'ER made me read. This, in turn, made me feel that I made the most use of my free time because usually I don't read at all.'*
- S23 *'I like ER for it made me more diligent.'*

S10 *'ER is very useful because I read them in my free time. Therefore, ER made me spend my time usefully.'*

S30 *'ER made me know more about English. ER itself has nothing bad at all. It depends on us whether to do it or not to do it.'*

S52 *'ER exposed me to story books which are such long texts that I have never read before and never thought of reading. It's very challenging. In the end, I know I can do it. I'm very proud of myself.'*

In sum, most of the students shared their views that ER is useful not only for enhancing their academic progress in terms of vocabulary knowledge and reading skills but also for improving their personal management skills.

**Interview Question 6: ‘Did you find any unfavourable conditions in reading graded readers? If so, what are they?’**

Students were asked the yes/no question ‘Did you find any unfavourable conditions in reading graded readers? in order to probe their negative feelings about ER. Most of them answered ‘yes’. They neither like reading nor read frequently in either English or Thai. They felt that ER was a heavy burden because they were not able to manage their time. They said that this was not because of ER, but rather themselves. They did not have enough responsibility to finish the books. For example, one student commented:

*S24 ‘ER has nothing bad at all but I myself made it bad because I was lazy. I read 12 books and finished 5. I have not finished the books due to my laziness. After choosing the books, I read them. But when I found the stories uninteresting, I stopped reading. In the past, I disliked English but now I like it ever since I understand what I read. ER made me like English more. ER is useful because for the students who don’t like English, ER may possibly change them – from dislike to like. Though they are not good at English, if they continue to practice with ER – it is possible that they can be good readers. I think more time should be spent for ER in class. Instead of reading out of class, we should do the reading in class. Students usually procrastinate. That is they delay doing the reading. They prefer to do the reading later but finally they can’t. They cannot do their reading. It passes.’*

Another stated:

*S58 ‘I had selected 13 books, and finished reading 6. I could understand only 2 books because the stories are too long. I didn’t have time to read. I was lazy and had lots of homework. I should rather blame myself than ER.’*

It can be stated that from the interview data, that most of the Thai students held a positive attitude toward ER. The unfavourable conditions in reading the graded readers were mainly pertaining to the students’ maturity with special

reference to responsibility and time management. They wanted to acquire knowledge of English and reading skills from their experience in reading the readers, yet they lacked time and space management skills. In order to help and encourage them to read, as they suggested as well as from the research's experience in teaching, ER should be done in class as a top priority in Thai EFL contexts in conjunction with time management and strategy development.

**Interview Question 7: 'Do you think ER should be integrated into English courses? Why? Or why not?'**

Students were asked the yes/no question "Do you think ER should be integrated into English courses?" Fifty-seven out of fifty-eight students (99%) answered 'yes'. Then they were asked an open-ended question "Why should ER be integrated into English courses?" An analysis of responses generated 4 response categories based on the most frequent responses. The most frequent response was: a chance to read beyond course books. The second most frequent response was: a chance to learn new experience and knowledge. The third most frequent was: a chance to improve reading ability and skills. Lastly, the fourth most frequent: was ER provides a chance for them to spend their free time usefully.

Reasons for the integration of ER into English courses are listed below, followed by a sample of the answers in turn.

ER provides a chance

1) to read beyond course books (35%)

- *S20 'ER is wider than the texts on the papers in a classroom. It widens our knowledge. Students ought to do ER to develop their knowledge of English.'*
- *S23 'ER is very useful. For those who don't like it, it is like a compulsory. But for those who like it, it is considerably more useful for we can read out of the box (textbooks and classrooms).'*

2) to learn new experiences and knowledge (30%)

- *S44 'ER should be included in our English learning because we can do the actual reading.'*
- *S33 'In the past, I wasn't good at English. I wasn't interested in reading English. Participating in the ER programme, I had a chance to read. After finishing the first book with joy, I kept on reading. Teachers should provide students with ER to help them enlarge their knowledge and skills.'*

3) to improve reading ability and skills (20%)

- *S17 'It should be in our learning process for it makes us read and practise.'*
- *S12 'It is really good. It does help me read faster and I don't need to look up every word.'*
- *S37 'Students need to be directed by teachers to be exposed to ER. They also need the marks for doing the reading or else they will not improve their English.'*

4) to make students spend their free time usefully (15%)

- *S26 'I can read the books when I have nothing to do. It's good for my free time.'*
- *S56 'It should be assigned to read during the vacation as well. We have plenty of time and we can finish reading more than during the term time.'*

The only one (1%) out of the fifty-eight interviewees who disagreed about the integration of the ER with English courses gave incisive comments that:

*S1 'I don't think at present people like to read so ER should not be integrated into English courses. When students select the books and take them but they don't read, it's useless. Had they been forced to read, they would not have read either. It is also useless. Students don't want to enhance their English because it is not necessary. They don't go abroad. If they are really interested in English, they will be active to learn and make an effort to learn by themselves. There's no need to push them to read or learn.'*

In addition to the above answers to the seven questions, with specific reference to the adoption of ER to be used in the real-life classroom settings at RMUTT, all of the interviewees (100%) suggested that scores should be allocated to reading the books as an incentive, the allocation to be approximately five to ten



per cent of the total scores of the module. It is more than likely students will read due to Thai student preferences to study for grades in an attempt to get good marks.

To sum up, the results from the interview questions related to students' attitudes toward extensive reading (ER) show that most of the students held a positive attitude toward ER by giving four similar answers in that they valued the positive reading experiences:

- They made gains in vocabulary and comprehension
- They were more confident in reading English
- They were proud to be able to read longer English texts
- They used their spare time effectively

Regarding the students' comments concerning unfavourable conditions in reading graded readers, most agreed on the benefits of ER, but they could not spend time reading due to lack of responsibility for their own learning, lack of time management, dislike of English as well as disinterest in reading. That means that they do not have sufficient maturity to work on their own for long periods without the presence of a teacher in the room. Rather, they preferred to read in a controlled situation in class among their classmates. Also, according to their suggestions, it would be an incentive for them to do the reading if there were some marks allocated to this activity -- reading out of class. It, thus can be noted that ER might need to be adjusted prior to being used in the Thai context. This will be elaborated further in Chapter 5.

#### **4.10 Chapter Summary**

This chapter has reported firstly the results of the quantitative analysis of two sets of data obtained from the study. One is from reading comprehension of two experimental groups after exposure to extensive reading (ER) for one semester by means of within (ER) group comparison and between (control) group comparisons, i.e. with the other four control groups without ER. The other is from the reading fluency of the two ER groups compared with the other four control groups. The findings reveal that extensive reading shows positive results in developing reading comprehension and particularly in reading fluency notwithstanding an average of five books read during the programme, i.e. one book read per two weeks.

The chapter has also reported other results obtained from the quantitative analysis of a questionnaire on students' attitudes toward ER together with the qualitative analysis of individual interviews about ER. The findings show similar results to those of the reading tests - that is, students held a positive attitude toward ER. In addition to these findings, the interview responses displayed, to some extent, the personality of the students and their preference for doing the reading, indicating that students prefer to read in class due to lack of responsibility, autonomy and time management. Some possible reasons for these results will be discussed next in Chapter 5.

## **CHAPTER 5**

### **SUMMARY OF THE STUDY, DISCUSSION OF THE FINDINGS, IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH**

#### **5.1 Introduction**

This chapter first presents a summary of the main study. Next, a discussion of the findings in relation to the research questions, and the effects of extensive reading on reading comprehension, fluency and attitudes is provided. Following this, the pedagogical implications in relation to English teaching and learning are included. Then, some limitations of the study are presented. Finally, the chapter concludes with suggestions for further research.

## **5.2 Summary of the Study**

This study builds on the literature and offers context-specific insights on teaching foreign and second language reading which has pointed out the importance of extensive reading as an approach to teaching and learning languages, for improving language skills including reading, writing, vocabulary knowledge, and overall language proficiency while also increasing motivation to learn and positive attitudes toward the target language (Cho and Krashen 1994; Day and Bamford 2000; Elley 1991; Elley and Mangubhai 1981; Hafiz and Tudor 1989; Mason and Krashen 1997; Nation 1997; Robb and Susser 1989). Extensive reading programmes have been growing in popularity worldwide as a significant support to the teaching of English, whether in L1, EFL or ESL (Davis 1995: 329). However, in spite of its effectiveness and popularity, most Thai university English teachers have not employed extensive reading. As an English teacher at a university in Thailand, the researcher was interested in examining what effect extensive reading would have on Thai EFL learners' reading comprehension and fluency as well as attitudes with the aim of enhancing Thai learners' English reading ability.

In an attempt to collect evidence regarding the effectiveness of extensive reading, it was considered important to follow the ten principles of an extensive reading programme as provided by Day and Bamford (1998; 2002) and reviewed earlier in Chapter 2.

The study focuses on three main research questions relating to the use of extensive reading as a learning tool in the teaching and learning of EFL in Thailand. It attempts to investigate: 'Does students' reading comprehension and reading fluency improve after exposure to ER?' (compared with participants in the

control groups), and ‘Do students in the experimental groups hold positive attitudes toward ER after exposure to ER?’

The major findings obtained from the statistical analysis generated by SPSS (Version 17.0), e.g. Wilcoxon test, Kruskal-Wallis test and Mann-Whitney test reveal that the improvement between the pre-test and post-test of reading comprehension is significantly greater for the ER groups than the control groups. This suggests that ER has a positive effect on students’ reading comprehension. Also, the results from the comprehension post-test between the six groups were significantly different which suggests that the post-test scores of reading comprehension between the six groups are not equal. Unfortunately, the post-hoc test results were inconclusive since the tests did not detect the significant differences across the groups, even though differences existed. This means that the comprehension post-test scores of the six groups are not equal but we do not know which group scores are different. For example, the comprehension post-test scores of experimental group 1 may be different from those of the two control groups. However, if we use a significance of the  $\alpha$ -level at .05 and conscientiously look at the post-hoc test results of the comprehension post-test scores on thirty pairs of groups (Table 4.11), we can notice that in the Anger recall test, two pairs of the control groups (C2a & C2b, C1a & C1b) have a level of significance at .031 and .024 respectively. This shows that there is likely to be a significant differences between the control groups and the ER groups because the ER groups’ means rank are the highest of all the five pairs. The possible significant differences can also be noticed in the Anger translation test of one pair, E2 & C2a which shows a significant difference at .022.

According to the tests of reading fluency, the results show that the improvement of wpm in the three-time series of tests is greater for the ER groups than the control groups. Finally, the results of the questionnaires and individual interviews showed that the students in ER groups held a positive attitude toward ER.

The results of the study provide three main contributions to our knowledge of extensive reading.

First, this study has contributed to the growing body of ER research by providing further empirical evidence of the benefits of ER in developing EFL university students' reading comprehension and fluency and the development of positive attitudes in the real classroom EFL context. Although students were exposed to ER for only one semester, their reading comprehension and fluency has improved along with positive attitudes toward ER.

Second, the interview results of the study reported important information for research in TEFL. For the research community it is argued that the adjustment of ER to suit language learners' motivation to read by means of extensive reading is significant and this is as yet underexplored. On the basis of students' comments on their reading approaches, teachers should offer extra credits as incentives to motivate students and also allot class time for learning and practice.

Third, the results of this study point to the feasibility of using ER in language teaching and learning at the university level in Thailand. For language teachers, this research could assist them in improving their current teaching performance and syllabus by integrating ER into English courses. Based on both the pilot and the main study, ER would work best in the Thai context if it was done both in and out of class. This study suggests that teachers need to devote

significant class time to actual reading and encourage students to engage in extensive reading outside class for a minimum of one to two hours per week.

### **5.3 Discussion of the Findings**

In this section, the major findings of the study in relation to the three research questions as mentioned above will be discussed in the light of the results reported in Chapter 4. The scope of the discussion covers three topics, namely reading comprehension, reading fluency, and attitudes toward ER.

#### **5.3.1 Reading Comprehension**

The first research question asked about the effects of ER on EFL learners' reading comprehension. The results of the pre- and post-test suggest a positive answer to this question. The findings of the scores within the two ER groups (E1 and E2) showed that overall after exposure to ER, both groups achieved a remarkable improvement in the post-test. This change is statistically significant (see Table 4.6) based on the results of four out of six tests (4/6), i.e. three narrative texts (Anger, Lucy, Sad) with two types of tests (written recall protocol, translation). The two tests that are non-significant are translation, one of Sad (E1); the other of Anger (E2), which correspond to those in the other two control groups (C1a, C1b) showing non-significant differences or no comprehension improvement in translation tests for these texts. This will be discussed in the following sections. Nevertheless, in contrast to the higher posttest scores in most of the tests within ER groups, it appears that only in the ER groups that the *post-test* scores were lower in the Lucy translation test (see Table 4.7). One possible reason for this negative result of the greater pre-test scores may have been the

length of the test text. Lucy (626 words) is the longest text but the easiest among the three. Anger (292 words) is the shortest but the most difficult. Sad (434 words) is moderate in length and in difficulty. These groups may have become fatigued and bored at doing the set task, the Lucy translation test. This can be related to *systematic* variation in performance or confounding effect, in that participants are not robots: their performance will spontaneously vary slightly from trial to trial, and from condition to condition (Field and Hole 2006: 81). In addition, from the researcher's observations, when taking the test for the first time, the students, intentionally, had paid more attention and had done their best more than they did in the later tests.

It should be noted that in the case of six of the measures of pre- and post-test comprehension scores (see Table 4.7) using translation tests with three different texts (Anger, Lucy, Sad), there were no significant differences in any of the translation tests within the two control groups (C1a, C1b). Most pre- and post-test scores of the C1a group, i.e. in five out of six tests (5/6), were equal while those of the C1b group were equal in three out of six tests (3/6). An explanation of this could be the learner factor that appears to be important. The C1a group are students majoring in Computer Technology in the Faculty of Science; C1b group are those majoring in Electronics and Telecommunication in the Faculty of Engineering. Although care had been taken prior to conducting the experiment to choose the groups according to their previous English 1 grades in the last semester, the aim being to create groups of equal English ability, there was still one important difference between these two control groups. They were not of equal overall academic ability, as measured by the RMUTT entrance examination, which included not only a test of English but also mathematics, science, use of



Thai and social sciences. The students in the C1b group were generally of a higher academic ability than those in the C1a group. Moreover, we felt that comparability of the groups is important because lack of equivalence of the groups at the beginning of the study would make it difficult to carry out a reliable comparison of the effects of the treatment; and this comparability would be best assured by measures of the participants' reading comprehension. We, thus, performed an analysis by comparing the reading comprehension pre-test scores of the four groups (see Chapter 4), using the Kruskal-Wallis test and the post-hoc Mann-Whitney tests. The results reveal that overall, there were no group differences based on the *pre-test scores* in seventeen out of eighteen (17/18) pairs of groups (see Table 4.2). The only pair showing significant differences was the ER groups (E1 vs. E2) with a medium effect size (.33) in the Anger translation test. In other words, although there is a difference in comprehension scores between E1 and E2, the difference is not strong.

However, surprisingly, contradictory results regarding written recall protocol tests were obtained in the C1b (control) group. It was unexpected that significant differences were found in all of the three written recall protocol tests with the three texts, Anger, Lucy, and Sad with a large effect size (.56, .52, .76 respectively) in the C1b group. This means that according to the pre- and post-test scores, the C1b group showed a considerable improvement in reading comprehension similar to that of the ER groups. One possible explanation lies in the overall proficiency of the learners in these groups. The learners in C1b were probably more proficient overall in English than those in ER. It is noticeable that even between the same experimental groups and the same major, i.e. Finance, the two ER groups showed statistically significant differences in all three timed tests

of reading fluency (see Table 4.13), notwithstanding their equivalence in reading comprehension shown in the preliminary test. In this regard, the results vary depending on the ability level of the learner. In other words, the learner grouping does seem to have been a factor as already explained. Below is a summary of the comprehension pre- and post-test.

- *Results of the comprehension pre- and post-test scores*

The ER groups (in 4/6 tests) outperformed the C1a group (in 1/6 tests) in most of the tests, but they did not outperform another control group C1b in 3/6 tests. This means that among the four groups, C1a showed little improvement while E1, E2 and C1b appeared to show almost equally greater improvement. This improvement, however, does not seem to have been influenced by practice effects which occurred when students took the same tests two times, in pre- and post-tests, because the groups took the post-tests four months after taking the pre-tests; besides the tests were not included in the learning process or activities that students were allowed to practice. Above all, Thai students are more accustomed to doing multiple-choice tests than doing writing tests since multiple-choice tests have been used widely in most educational levels in Thailand. Taking written recall protocol and translation tests would be a new experience to the students.

- *Results of the comprehension post-test scores*

Let us now turn to another result of the effects of ER on reading comprehension which will be used to answer the first research question as well. The results were derived from the analysis of the post-test scores among the six student groups. Because of absences, the number of students taking the tests differed from the initial number and the post-tests. As might be expected, the reading comprehension in five of six tests (5/6) was affected by the format and the type of tests as analyzed by using the Kruskal-Wallis test (see Table 4.7). This means that the reading comprehension in all six groups was statistically significantly different. However, when the differences in the scores of the six groups were further tested across 30 pairs of student groups by the post-hoc Mann-Whitney tests, they were found to be non-significant, i.e. no significant difference was found. In other words, the effect of the six tests on reading comprehension seemed to be the same in all thirty pairs of student groups.

It should be noted that these results are inconclusive as the tests are not suggesting where the differences might be. In other words, they do not provide specific information about which groups differ in spite of the fact that the reading comprehension of the six groups is not equal. Clearly, further work needs to be done.

*Results of the improvement in reading comprehension of the ER groups related to:*

- *Few/no evident contaminations*

As seen by the review of literature in Chapter 2, researchers in ER have claimed that comprehension improvement is one result of being exposed to ER. This was corroborated by this study. The finding that the ER groups had significant gains in the area of comprehension and the control group did not was surprising because from the in-depth interviews with some of the participants (fifty-eight), most of the ER students had not finished reading all of the fifteen books they had selected, though each student was required to read at least one book per week. Rather, they have read on average five to seven books during the fifteen weeks. Not only five books read, but also three to five books understood were reported by the participants. They, then, read one book every two weeks. Besides, none of the participants studied any other English module or extra English classes concurrently during the experiment. This study, consequently, unlike some previous ones as discussed above, had few and no evident contaminations, the effects of outside exposure in the community and from other classes at the university, which influenced the study. From the interviews with participants, the researcher's experience and personal conversations with colleagues, this disappointing amount of reading is considered extensive by EFL Thai university students on account of the fact that they have hardly read any English texts out of class with the exception of reading assignments. The small amount of reading done by these students is corroborated, in general terms, by the report of the Thai National Statistical Office (2009) which reveals that the average Thai read only two books in 2008.

- *Less formal learning English in class*

Another point to be considered is that, as will be recalled, the four control groups had full instructional periods of English 2 for three hours including taking the timed reading comprehension tests for 15 minutes a week while the experimental groups had merely two and a half hours including taking the timed reading tests. The ER groups had ER for a given period of time, 30 minutes, without doing any reading but such activities as a 1-minute book report, handing in book report forms, returning books and choosing books to take home. The reason for doing these activities is to evaluate the students' progress in reading graded readers. The researcher also needs to verify that the students have read what they say they have read. From the students' point of view, the fact that teachers spend classroom time on evaluation or follow-up activities encourages students to take their reading for pleasure more seriously (Mikulecky and Jeffries (2001). Furthermore, from the interviews with the participants, activities that involve sharing the reading experience with other students can encourage the students to read as well. In this study, the only ER activity in every class session is a 1-minute book report given orally by the students and the teacher for the reason that in real life when we talk about books, we usually express our reaction to these books. On the other side, the students in this study did more than this; they usually shared what they did not understand and what not understood as well as double checking their understanding with their classmates. This is because we did not discuss the books in class due to the limited class time available.

In sum, learners in all classes in the study followed the same English 2 syllabus that accompanied the textbook. The key pedagogical differences between the ER groups and the control groups was that the treatment groups spent half an

hour of each class time doing ER activities without doing any reading whereas the comparison groups spent the entire period practicing elements such as grammar, vocabulary and intensive reading covered in the textbook. To put it more simply, without the whole period of instruction, the students in the ER groups still scored in reading comprehension tests as well as their counterparts who had the full instructional period for English 2. The fact that they did not score lower than their counterparts is also significant. Therefore, their reading comprehension should be considered as having improved to some extent since they had less study time in regular class.

- *Results corroborating those of previous research*

Overall, if the previous experimental research results (with some shortcomings) were accurate, one would expect this outcome. That is, measurable gains from learning reading extensively can be found in learners' reading comprehension, even in a short period of time. Though the results of this study are suggestive, they parallel those of previous ER research conducted by Mason and Krashen (1997 in experiment 1), who found significance at one semester (14 weeks) using EFL Japanese university students in Osaka, Japan. Taguchi, Takayasu-Maass and Gorsuch (2004) found improvement at 17 weeks using ER with Japanese students at a university near Tokyo.

- *Results related to the tests used compared with previous research*

The tests used in this study were constructed on the basis of reading research, and were unique, aiming to fill the gap in the quality of the testing instruments which is a crucial issue in experimental research on ER. A wide range of testing instruments have been used in ER research such as the standardized tests of Hafiz and Tudor (1989), Robb and Susser (1989), Lituanas, Jacobs and Renandya (1999), and Al-Homoud and Schmitt (2009). Some studies have used such in-house tests or tests constructed by researchers, such as Mason and Krashen (1997), Hitosugi and Day (2004), and Maxim (2002). Others have used tests designed for L1 rather than L2 or FL subjects (the applicability of the tests), such as Hafiz and Tudor (1989), Lituana, Jacobs and Renandya (1999), and Taguchi, Takayasu-Maass and Gorsuch (2004). The comprehension test results of this study corroborate those of previous research.

- *Explanation of the improvement in reading comprehension of the ER groups*

Extensive reading can play an important role in developing the components upon which fluent second language reading depends: 1) a large sight vocabulary, 2) a wide general vocabulary; and 3) knowledge of the target language, the world, and text types (Day and Bamford 2005). The first component will be discussed in Section 5.3.2 Reading Fluency. The last two components or the factors necessary for the improvement in reading comprehension will be discussed below.

- *The development of general vocabulary knowledge*

The improvement in reading comprehension of the ER groups may be a consequence of the development of general vocabulary knowledge since the need for a large vocabulary is equally clear in all fluent second language reading (Day and Bamford 2005). Grabe (1988: 63) points out that fluent readers need a massive receptive vocabulary that is rapidly, accurately, and automatically accessed, and the lack of such a vocabulary may be the greatest single impediment to fluent reading by ESL students. Therefore, these students who have read the graded readers can increase their general vocabulary knowledge due to incidental acquisition, the incidental acquisition hypothesis suggesting that there is a gradual but steady incremental growth of vocabulary knowledge through meaningful interaction with texts (Coady 1993: 18).

- *The development of different types of knowledge*

According to Day and Bamford (2005: 18-19), the second factor necessary for fluent reading is knowledge, for it is on knowledge that comprehension depends and reading is an excellent source of the knowledge that is needed for reading comprehension. Second language readers need linguistic, world, and topical knowledge, and it appears that they can acquire this knowledge through second language reading. Grabe asserts that “the more reading done, of the greatest informational variety and range of purposes, the quicker the reader will achieve ... the capacity for creating, refining, and connecting diverse arrays of cognitive schemata” (1986: 36). In this regard, the students in the ER groups who read the graded readers and focused on the meaning of what they read had the best possible chance of developing this knowledge.



In conclusion, the results of reading comprehension tests in this study provide an indicative result of a positive effect of extensive reading on learners' reading comprehension which is in line with previous experimental research, notwithstanding the disparities of duration of the study, reading assessment instruments and the specific contexts as well as participants in different educational levels.

### **5.3.2 Reading Fluency**

The second research question investigated the effects of ER on EFL learners' reading fluency. The results are encouraging. They indicate that greater word per minute (wpm) reading fluency was achieved in all three time series in both of the ER groups. Learners who were exposed to ER made more progress in their reading speed compared to the four control groups without ER. The Kruskal-Wallis test results revealed that the rate of reading time of three time series in all six groups was statistically significant, i.e. it was different. When the results were further compared across groups, using the post-hoc Mann-Whitney tests (see Table 4.11), the differences were also found in every time series. The time of wpm in Time 1, Time 2 and Time 3 in one pair between an experimental group (E1) and a control group (C1a) was significantly different with a large effect size: .66, .73, and .63 respectively. This means that there is strong evidence of differences between these groups. Moreover, from the evidence of the findings in Table 4.13, there was a clear effect for time, with the subjects in both ER groups showing a significant improvement in reading time in the fluency tests. The ER groups spent less time than did the control groups in all of the time series tests.

- *Results of the timed reading comprehension tests*

With reference to the timed reading comprehension tests which were accompanied in these fluency tests, the results of the comprehension scores based on the post-hoc Mann-Whitney tests showed that there were no statistically significant differences among the six groups, though the Kruskal-Wallis tests showed that the three tests were statistically significant different. In other words, the comprehension scores of the six groups were not statistically different; rather they were equal. This finding is similar to that of the aforementioned reading comprehension tests as measured by the written recall protocol and translation tests.

Drawing on the data provided, it can be concluded that the ER groups outperformed the four control groups in their ability to read faster in the timed reading tests. This can be illustrated in the following pattern of results, Figure 5.1 below as summarized from the findings in Table 4.11

Figure 5.1 Patterns of results of time in reading in fluency tests of six groups

	<b>Time 1</b>		<b>Time 2</b>		<b>Time 3</b>
Decreasing Time ↓	Group		Group		Group
	C2b		C2b		C2b
	C1b		C2a		C2a
	C2a		C1b		C1b
	C1a		C1a		C1a
	E1		E1		E1
	E2		E2		E2

Figure 5.1 gives an overall picture of the findings of the time in twelve reading fluency tests from six student groups in the study, two experimental groups (E1,

E2), and four control groups (C1a, C1b, C2a, C2b). The groups were ranked in ascending order of their results based on decreasing time. For example, in Time 1, the C2b group spent more time in reading than those in the C1b, C2a and C1a groups respectively; and their reading times were represented in the same group, which is not significantly different. The E1 group spent less time than the E2 group with a significant difference. Overall, the results are consistent. The time that the ER students spent on reading the twelve texts (used to test reading comprehension every week for twelve weeks) was less than those who read the same texts and took the same tests. This indicates that learners who were exposed to extensive reading improved their reading fluency more than those who were not. The results of the study indicate that the ER approach has an effect on reading fluency. Students made progress in their reading speed after the treatment.

- *Results corroborating those of previous research*

The results support the findings from all of the ten pieces of previous research which can be classified into three groups: 1) no assessment procedures or characteristics of tests used to measure reading fluency, 2) no comprehension tests used to measure reading fluency, and 3) use of reading comprehension and speed tests simultaneously to measure reading fluency. It could be mentioned that this particular kind of research pertaining to reading fluency is, in fact, remarkably sparse represented in terms of the methodology used in measuring reading speed and comprehension simultaneously as well as sufficient detail of methodological procedures and characteristics of tests used in the studies.

The first group of previous research studies related to measuring reading fluency with no assessment procedures or characteristics of tests reported

comprises three studies: Robb and Susser (1989), Lituanas et al (1999) and Lao and Krashen (2000).

The second group comprises four studies, measuring reading fluency with no comprehension test: Mason and Krashen (1997 in experiment 3), Al-Homoud and Schmitt (2009), Sheu (2003) and Bell (2001).

The third group comprises the remaining three studies which measured reading speed and comprehension simultaneously: Lai (1993), Taguchi et al (2004) and Iwahori (2008).

In sum, all of the ER studies cited above reveal successful development in reading speed from exposure to extensive reading. They were conducted in both EFL and ESL contexts at secondary and tertiary levels of education, from a minimum of seven weeks (Iwahori 2008) to a maximum of one year (Mason and Krashen 1997), using at least one group of 10 (Taguchi et al 2004) through 91 participants (Lao and Krashen 2000). Only three of the ten studies used a method for measuring reading speed and comprehension simultaneously. Despite differences such as measurement tools and participants, these studies reveal similarities in reading fluency improvement across ESL and EFL settings. The current study also supports this. It was evident that the 15-week ER programme was able to make a positive impact on increasing the university Thai students' reading speed based on the twelve simultaneous timed reading comprehension and fluency tests. As Bell (2001) states, gains in speed may be easier to achieve than gains in comprehension. Likewise, Yamashita (2008) concludes that the effects of extensive reading might be manifested more quickly in general reading skills than L2 linguistic ability, at least for adult L2 learners, who were exposed to graded readers in a 15-week reading course.

The results of the study, as already reported, are revealing and lend support to the ER approach which claims that ER can play an important role in developing the component upon which fluent second language reading depends, namely a large sight vocabulary. Sight vocabulary is words that readers are able to recognize automatically (Day and Bamford 2009). The development of a large sight vocabulary can be seen as over-learning words to the point that they are automatically recognized in their printed form. The best and easiest way to accomplish this is to read a great deal.

*Explanation of the improvement in the reading fluency of the ER groups*

- *A large sight vocabulary/incidental vocabulary learning*

According to Ellis (1999: 36), a number of studies have shown that incidental vocabulary acquisition can take place through extensive reading. For example, Pitts, White and Krashen (1989) report that intermediate students were able to acquire a measurable amount of invented ‘nasdat’ words after reading Burgess’ *A Clockwork Orange* for 60 minutes. Other studies by Day, Omura and Hiramatsu (1991), Dupuy and Krashen (1993) and Paribakht and Wesche (1997) also report successful vocabulary learning from reading when no instruction was provided. In Horst, Cobb and Meara’s (1998) study, exposure to a complete set of graded readers over six days resulted in a high level of incidental acquisition (i.e. about 22% of the target words). The process of incidental vocabulary learning becomes more efficient as language reading ability improves. To accomplish this, readers must read materials with a very low ratio of unknown to known words. In other words, texts should be essentially  $i - 1$ , contain only a small number of

unknown words and difficult syntactic structures (Day and Bamford 2005), to which this study corresponds by means of using graded readers as reading materials.

- *“i minus 1 materials”*

Another explanation for the reading speed improvement may be related to the difficulty level of the texts the participants read which was slightly below their current language proficiency, defined as “i minus 1 material” (Krashen 1985). This kind of material is also used for automaticity training (Samuel 1994: 383), where “i” is the students’ current level of acquisition. The reason for “i minus 1” is that the goal of the automaticity training is developing a large sight vocabulary rather than the learning of new linguistic elements. Since the bulk of vocabulary and grammar is well within the reader’s competence in i minus 1, without too many i + 1 distractions, the development of a sight vocabulary is possible (Day and Bamford 2005: 16-17). Regarding this, the primary way to develop fluent reading comprehension, based on a wide range of research, is extended practice in reading (Grabe and Stoller 2002: 90).

- *Characteristics of the graded readers*

Finally, the last factor in reading skills improvement may be the characteristics of the graded readers. They are longer texts. According to Nuttall (2005: 39), there are reading strategies which can be trained only by practice on longer texts - scanning and skimming, the use of a contents list, and index and similar apparatus. More complex and arguably more important are the ability to discern relationships between the various parts of a longer text, the contribution

made by each to the plot or argument, the accumulating evidence of a writer's point of view, and so on.

In conclusion, according to Grabe (2009: 312), fluency is concerned with the ability to recognize words efficiently and automatically, and read shorter passages accurately and rapidly, which is the assessment used in this study. We would also hope that it eventually leads to silent reading of texts at a good reading rate and for longer periods of time. The only way to ensure the latter goal, however, is not by fluency practice itself, but by practice in extensive reading. Although extensive reading, by itself, is not sufficient for the development of fluent reading comprehension abilities, such abilities cannot be developed without extensive reading (Day and Bamford 1998; Gough and Wren 1999; Grabe and Stoller 2002).

### **5.3.3 Attitudes toward ER**

The third research question addressed the learners' attitudes toward ER. This element was examined by the quantitative analysis of the questionnaire data and an additional individual interview. The findings suggest that the majority, of extensive reading student respondents, 89 (84.6%) had a positive attitude toward ER, and the interview results confirmed that the students appreciated and valued extensive reading, supporting the findings of Takase (2003).

As we have already reported (see Chapter 4), students' responses to the 13-item questionnaire in this study indicated that they believe the ER approach helped them to improve reading skills including reading for general information and detail as well as subordinate ideas and main ideas, gaining more knowledge of reading methods, learning to read, bringing out their prior knowledge into reading comprehension, and applying what they had learned in practice. Students also believed that the ER approach was effective, enjoyable, and interesting and that they would like this type of reading more. This supports the findings of Maxim (1999) investigating the effects of reading a longer, authentic text on the language proficiency, reading comprehension, and cultural horizon of beginning foreign language students. The post-treatment attitude survey results indicate that the treatment (extensive authentic reading) group perceived a significant change in their reading strategies, which potentially provides them with more appropriate skills for making the transition to upper-level language study.



One of the possible reasons for these findings is that when students have a feeling of improvement in their language ability, they tend to have a positive attitude toward what they have experienced. This can be represented as a virtuous circle: improved ability → positive attitude → improved ability. This reflects Sun's (2003) findings, in which a similar result was reported with EFL learners in Taiwan who participated in the Extensive Reading Online (ERO) programme. The learners improved their reading proficiency a great deal and held a positive attitude toward the reading system. The results that the students found extensive reading interesting is similar to Sims (1996) and Robb and Susser (1989); the latter point out that it is a logical consequence of the fact that the students were able to choose materials interesting to them. The result that students found ER enjoyable is similar to Yamazaki's (1996) questionnaire results indicating that Japanese high-school learners found pleasure in reading in English after exposure to ER for nine weeks.

To compare the findings from this study with the work completed by others, it is surprising that prior research on attitudes toward ER is scarce. Apart from this study, the only study is the one by Takase (2003) who investigated high school EFL students' motivation to engage in a one-year extensive reading programme in Japan by examining the relationship between their attitudes/motivation and the amount of reading they did. The questionnaire results revealed that strong impacts were observed in the middle and the low groups in terms of affect and increases in these learners' sense of achievement. The interview results revealed that the majority of the participants expressed favourable attitudes toward ER and reading English books. They also reported gains in self-confidence in learning English as a result of participating in the

extensive reading programme, which is consistent with the interview responses in this study.

- *Attitudes results compared to those of previous research*

There are four previous studies on attitudes toward reading, Chiang (2009), Lao and Krashen (2000), Leung (2002), Al-Homoud and Schmitt (2009), and three toward reading in the target language, Asraf and Ahmad (2003), Camiciottoli (2001), Hitosugi and Day (2004). All of the research findings report positive attitudes toward both reading and the target language as an effect of ER.

To sum up, although limited in number and scope, the previous studies support the view that ER can lead to gains in positive attitudes toward extensive reading, reading, and reading in a foreign language.

- *Factors behind the learners' positive responses to the attitude survey and interview*

In the present study, there are several viable factors behind the learners' positive responses to the attitude survey and interview. Based on the findings, the students not only enjoyed the reading and found reading graded readers an interesting and effective experience, but they also expressed interest to read graded readers more. The reasons for this appear to be the graded readers involve:

1. A challenging activity: reading longer texts in the form of a whole book is a daunting challenge for the students. Graded readers were something of a novelty at the beginning of the treatment because the students were asked to choose the books that looked interesting to them and read on their own outside

class. Initially, the students voiced their concern over reading ability to comprehend the text, a simplified novel. This represented the challenge of their English reading ability to finish the book, notwithstanding being told to read for general understanding which is the aim of extensive reading. Later, they felt happy and confident in reading after having finished the first book. As the treatment progressed, they responded increasingly in favour of the books. This seems to be because they were able to read at their own pace; they were able to read the sentence again if they did not understand it the first time. Slower learners can read more slowly, and faster learners can read faster. Eventually, experiencing reading longer texts at first hand, the students recognized that their success in reading these texts made them come to enjoy language learning and to value their experience in extensive reading (although extensive reading was not a method that they had previously been used to). This, in part, may also be due to the principles embodied in ER that encourage students to read.

2. Interesting texts: graded readers are simplified novels that are written especially for beginning and intermediate level students, so the books themselves allow students to read without anxiety and difficulty. Rather, the simplified texts can help promote enthusiastic and independent reading among students by making content comprehensible and getting students excited about reading a large amount of interesting materials (Zoreda and Vivaldo-Lima 2008: 23). As Williams (1986) contended, in his top ten principles for teaching reading, “In the absence of interesting texts, very little is possible.”

This is a psychological benefit of using graded readers, Mason and Krashen (1997), in the study referred to above, have found that reluctant readers can become motivated and eager readers. It can be argued that extensive reading

tends to be a pleasurable activity, which made learning easier (Waring 1997) for the students in this study.

3. Useful colloquial language: from the interview responses, students liked reading graded readers because they provided new words and phrases which they could use in daily life. So did the participants in Cho and Krashen (1994), as cited above, who reported that reading helped their oral/aural proficiency because the story books contained a great deal of useful colloquial language that learners with mostly formal language instruction experience had missed. Another study (Tran 2006: 175) reported her experience related to extensive reading that not only was her stock of words increased, but she was also exposed to various ways by which words could be used to describe and express ideas.

#### *Explanation of possible reasons for the small number of books the students read*

- *Little reading beyond textbooks*

In the specific context of this research, the students were similar to those in Italy in that the students' frequency of reading in English is quite low and the students do little reading in English that goes beyond required course textbooks (Camiciottoli 2001). This strongly resembles the RMUTT students. Accordingly, to implement extensive reading with university students in the Thai contexts, ER should be adjusted with the aim of encouraging students to start reading and gradually get used to good reading habits. Accordingly, ER should be done in class for at least fifteen minutes in every class session (see Implications of the Study). As we have seen from the interview responses of the study, several students asked the researcher to provide an extra half an hour to do the reading

besides the regular English class. One of the reasons for this is that the learners do not have high motivation to cultivate their English reading skills. In addition to the adjustment of ER, based on the learners' characteristics and learning preferences as well as the results of the interview, fluency tests should be used as a pedagogical tool to enhance learner's reading skills together with credits or scores awarded as an incentive. This is due to the fact that students prefer to learn in a controlled situation with their classmates rather than study on their own out of class time. Hence, by making the best use of test taking, teachers can help students improve their language skills.

In conclusion, the results of the study have shown that not only is there improvement in reading comprehension and fluency of students, but that there are positive attitudes toward ER as well. The claim that ER is intended to help learners develop into more fluent foreign language readers (Day and Bamford 1998; Krashen 1993; Nuttall 1996; Welch 1997) is in line with the results revealed in this study.

#### **5.4 Pedagogical Implications**

The empirical evidence of this study yields insights into the use of ER and timed reading in the actual classroom in the Thai context. The results of the study, which stand in line with previous research, show that extensive reading produced positive outcomes in terms of reading comprehension, fluency, attitudes and self-confidence in reading English. Some implications for the teaching and learning of EFL reading skill are suggested 1) integration of ER into the English curriculum, 2) teacher's guidance and encouragement, 3) use of scores as a strong

motivation to read, and 4) reading in a controlled situation. Further details are as follows.

1. Integration of ER in the English curriculum: to exploit the benefits of ER, it should to be integrated into the English curriculum of EFL language institutions, especially in EFL contexts where most learners have no or little access to reading materials or speakers of the target language, which is different from ESL contexts, where learners are exposed to the target language and culture. ER should not be used as a stand-alone tutorial, resembling a self-study for individuals but as an important supplement to instruction and practice within the format of traditional English courses in the classroom. ER needs to be done with suggested activities that take maximum advantage of the opportunity to learn and practice in a group setting. The reasons for this are that it is vital that learners have a chance to read and are required to read a large amount of texts within their comfort zone (reading ability) since ER is the way learners learn to use the language. In other words, they are able to read without difficulty with the language features. In normal classes, learners learn about aspects of the language such as grammar and vocabulary and do intensive reading including reading strategies but they do not read a lot in terms of doing actual reading. If ER is included in the curriculum, this means that ER is important and necessary to teaching and learning performance. Waring (2004) insists that ER is a completely indispensable part of all language programmes.

2. Teacher's guidance and encouragement: for a successful programme of ER, students need to be guided and encouraged by teachers, who provide a clear and direct purpose for the reading. If ER is left to be done by students alone, the programme aiming to get students to read extensively will be unsuccessful. For

example, Green (2005) describes the disappointing results of the implementation of the Hong Kong Extensive Reading Scheme in English (HKERS) because in the vast majority of schools the ER lesson did not take the form of a teacher-led reading conference to check progress and help students choose appropriate books, activities recommended in official guidelines. Elley and Mangubhai's (1983) study of the Fijian 'Book Flood' recommended regular class meetings in which teachers read aloud to students. Bell's (1998) practical advice on running an ER programme emphasized that regular conferencing between teacher and students played a key role in motivating students in the Yemen to read the books. This corresponds to the findings of this study, showing that most Thai students preferred to spend time doing the reading and reading activities in class rather than doing them alone out of class. They enjoyed doing activities with friends.

3. Use of scores as a strong motivation to read: also recommended as an important and necessary component of integrating ER in the curriculum is a 'score' or 'mark', which is required in terms of learners' participation in class, not particular testing that would assess learners' language proficiency. This element is based on the researcher's experience and evidence obtained from the study – typical Thai learners usually study for scores or grades and prefer to have them as an incentive as well. They make every attempt to have good grades. Depending on teaching contexts teachers may want to consider allowing students to decide together how they would prefer to have their reading evaluated. For example, students may form book promotion teams to introduce books to other classes, write sequels to stories or books, and create comic books or simplified versions of books for less proficient students to read (Dupuy, Tse and Cook 1996). This can

be quite liberating for both the teacher and the student (Mikulecky and Jeffries 2001). Students' willingness to read and practice is required to make ER work.

4. Reading in a controlled situation: during the ER session everyone including the teacher has to do the actual reading, namely sustained silent reading for about twenty minutes or less. This is due to the Thai students' cultural background; they like reading in a controlled situation in class. This is to develop in students the habit of reading in English and to make students get used to sustained silent reading and to prepare them to read longer texts as well. This can possibly be done by using timed reading or fluency tests which are similar to the ones used in this study, the results of which revealed that timed reading is suitable for use as a pedagogical tool to increase fluency in reading English in more limited contexts and with the provision that learners move onto real fluent reading at a later stage

### **5.5 Limitations of the Study**

This study revealed some significant results of the reading comprehension and fluency tests taken by the student groups who were exposed to ER. However, limitations should also be taken into account. It is important to acknowledge the limitations of the study to assist future researchers who plan to use similar methods and ideas. This will also pave the way for extending this study into any future research. These limitations are presented as follows.

First, this study is limited to the investigation of ER in terms of out-of-class reading only due to the limited class time available. ER was introduced experimentally as supplementary to the regular English 2 class which followed a traditional curriculum including four integrated skills as well as reading



selections, comprehension questions, and vocabulary and grammar exercises. The ER groups did not read extensively in class.

Second, the participants were not randomly selected but were subject to purposive sampling due to the fact that they were existing groups enrolled in the English 2 module. The fields of study of the experimental groups and the control groups were different. To reiterate, the former majored in Finance; the latter in Engineering.

Finally, there are limitations due to the nature of the experimental study. The experimental method is ideal for determining cause and effect and so it was used in this study which was intended to test the theory of ER. The current experimental study has a between-groups and within-subjects design. In general, the design that is most frequently used is the pre-test /post-test control group design using two groups – a control group and an experimental group. One problem with this design is that pre-testing the participants might affect their subsequent performance. Hence the Solomon four-group design controls for that possibility. Typically, the Solomon design contains four groups, involving a pre-test/post-test control group, with two experimental and two control groups. As Field and Hole (2006: 78-79) commented, it is an excellent design, but it suffers from the disadvantages of being expensive in terms of time and the number of participants: it basically doubles the cost of running a study, and as a result, is rarely used in practice. This study is a Solomon design using six groups instead of four in order to control confounding effects, i.e. participants become better practiced at doing the set task including the effect of using the same tests in both pre- and post-test (as explained in Chapter 3). The unexpected disadvantage of this with specific reference to statistical analysis is that the results of the post-hoc

analysis of the comprehension tests between six groups (using thirty pairs of groups) did not detect differences between the groups, even though the first test, the Kruskal-Wallis test, revealed significant differences. Therefore, this researcher suggested that the pre-test/post-test control group design is probably the most straightforward and appropriate type of experiment on ER that we can perform in the real classroom context because the smaller it is, the easier it will be to detect the effects of ER. One way to reduce the participant-induced variable would be to match participants in different groups according to factors that might affect our results such as level of English proficiency, study major, or age, sex, or year of study at the university. Another simpler and more effective design if one had a longer period of time (about one year) is a repeated measure design or a within-groups design. This uses the same participants in every condition – so that a given participant produces one result for every condition of the experiment. In this regard, all we have to contend with is individual variation in participants' responses to the experimental manipulation or ER.

## **5.6 Recommendations for Future Research**

This study has been the first study to investigate the effects of ER on reading comprehension, fluency and attitudes toward extensive reading of EFL students in the Thai higher education context by using multiple reading comprehension measurements. The results have a number of implications for further research as suggested below.

It is evident that the learners' reading comprehension improved after a short period of exposure to extensive reading. It is suggested that further research should investigate the efficacy of in-class and out-of-class extensive reading

including reading in an e-environment on reading motivation and attitudes toward English as a foreign language to investigate if learners' motivation changes as their extensive reading proceeds. This further study would comprise both quantitative research, e.g. in the form of a number of different questionnaires and structured interviews administered at different points during the duration of the project and qualitative research, e.g. observation of classroom sessions and unstructured interviews.

Regarding the timed reading comprehension test, further research needs to look at whether this kind of test can be successfully applied in the EFL classroom in order to support fluent reading because reading develops gradually; fluent reading is the product of long-term effort and gradual improvement (Grabe 1991). A follow-up classroom-based study ought to investigate this potential area of reading research for the fields of English as a foreign language and teaching methodology.

Finally, the subjects of the study were all Thai with one language background and the same level of education. This avoided introducing other variables caused by differences in language background. It would be relevant to see whether the results of research on other language and educational backgrounds differ from the findings of this study.

## **5.7 Conclusion**

This chapter has discussed three main aspects of the findings revealed by the study with specific reference to the research questions. It has reviewed some of the research related to these findings. The study has claimed that extensive reading is an effective pedagogical method for helping Thai university learners EFL to improve their foreign language reading skills enjoyably and effectively, and it should be employed in EFL contexts. Extensive reading gives students a chance to choose books to read on their own, in their own time, at their own pace, and without teachers. Students, in turn, can acquire a considerable sense of individual autonomy.

From the results of the study, even though the programme had limited success in encouraging all the participants to read a large number of English simplified novels, it was effective for most of the participants. They displayed gains in reading comprehension, positive attitudes toward extensive reading, and particularly significant gains in reading fluency.

Above all, the majority of students expressed a sense of achievement and felt themselves be more confident readers through finishing a whole English book without consulting a dictionary. This feeling enhanced their motivation to read more. Consequently, the researcher is of the belief that ER can foster learners' reading skills. To adopt ER in teaching English in the university environment in Thai contexts, it is suggested that ER should be adjusted in order to encourage learners to read extensively and, most importantly, read happily.

Following the discussion section are pedagogical implications which include, for example, the integration of extensive reading into the English curriculum, additional incentive scores, and another pedagogical tool, i.e. timed

reading. The limitations of the study are related to out-of class extensive reading, timed reading fluency tests and different fields of study among the participants. The subsequent section details recommendations for future research which propose that the effects of in-class and out-of-class ER on motivation and attitudes toward EFL be further investigated. Another future area of research is timed reading fluency tests as well as research on students with other language and educational backgrounds.

It is hoped that the current research has shed some light on the effects of ER and encouraged teachers as well as researchers to further pursue its contribution to the teaching and learning of EFL within real-life classroom environments. As Kamil, Langer and Shanahan (1985: ix) assert “The surest avenue to improve educational practice will occur through the application of knowledge derived from careful research.”

With specific reference to this research project, my learning and research experience has considerably been built up and improved. Completion of this thesis, which has taken almost four years of study, has been like a journey to distant islands in quest of ‘new knowledge’. It is a process that needs planning, managing, and navigating. Throughout the journey I have read a great deal, with persistence and tenacity, in order to get to the final destination -- to produce ‘new knowledge’. This piece of research is completed. However, more journeys are still to be made, for reading is a lifelong process and ‘Research is formalized curiosity. It is poking and prying with a purpose,’ (Hurston 1942: 43). I will try to open the door of knowledge and share the struggles of my own research journey with others. ER may not be the best form of teaching, but it has certainly introduced me and the learners to the importance of the development of reading in English.

Reading puts our life in a new and uplifting perspective. There are not shortcuts to learning to read as we only learn to read by reading.

## Appendix A: Documents Related to the Research Project

### A1: Approval of Research Project by RGEN

Research Committee

Research Governance and Ethics Sub-Committee  
(RGEN)



To Miss Kamonnat Tamrackitkun  
cc: Professor Alison Adam & Dr Sian Etherington  
From M Pilotti, Contracts Officer  
Date 01 August 2007

MEMORANDUM

**Subject:** Approval of your Project by RGEN

**Project Title:** Extensive reading: an empirical study of its effects on EFL Thai students' reading comprehension, reading fluency, and attitudes

**RGEN Project code:** RGEN06/99

Following your responses to the committee's queries, based on the information you provided, I can confirm that they have no objections on ethical grounds to your project.

If there are any changes to the project and/or its methodology, please inform the committee as soon as possible.

Regards

Max Pilotti  
Contracts Officer  
MP/ET

For enquiries please contact  
M U Pilotti, Contracts Officer  
Contracts Office for Research and Enterprise  
Research and Graduate College  
Faraday Building  
Telephone 0161 295 52654 Facsimile 0161 295 5526  
E-mail m.u.pilotti@salford.ac.uk

## Appendix A2: Request for Permission Letter for Research at RMUTT



**Dr Paul Rowlett**  
Head of School

**School of Languages**  
The University of Salford  
Maxwell Building  
Salford, Greater Manchester  
M5 4WT, United Kingdom

T +44 (0)161 295 5990  
F +44 (0)161 295 5335  
enquiries-languages@salford.ac.uk

[www.languages.salford.ac.uk](http://www.languages.salford.ac.uk)

08 December 2007

School of Languages  
University of Salford  
Greater Manchester  
United Kingdom  
M5 4WT

Dear Associate Professor Dr. Numyoot Songthanapitak,

I am an existing English lecturer at RMUTT and currently a PhD student in TEFL (Teaching English as a Foreign Language) at School of Languages, University of Salford, Greater Manchester, UK. I am sponsored by Rajamangala University of Technology Thanyaburi (RMUTT). At present I am in the process of conducting a research project as part of my doctoral dissertation under the supervision of Dr. Siân Etherington and Mr. Huw Jarvis, School of Languages of the University of Salford, UK. My research study is entitled "Extensive reading: an empirical study of its effects on EFL Thai students' reading comprehension, reading fluency, and attitudes".

This research project is based on an extensive reading approach, where students read large quantities of meaningful and interesting materials for general understanding and pleasure. Students can choose what they want to read from a variety of reading texts. In addition, it is suggested that "learners need to read about one reader per week in order to meet repetition of new words soon enough to reinforce the previous meeting" (Nation and Wang 1999; 355). The underlying concepts of extensive reading are that "We learn to read by reading" (Smith 1994:4) and "The next best way to improve your knowledge of a foreign language is to read extensively in it" (Nuttall 2005: 128).

The study aims to investigate the effects of extensive reading on reading comprehension, reading fluency and attitudes to extensive reading of EFL university students in the Thai context. Three different measurements will be used to assess reading comprehension and reading fluency: written recalls, sentence completion, and multiple choice questions whereas a questionnaire with an interview including an observation will be utilized to gather data on attitudes.

The benefits of this project for the students is that they learn to read by reading what is interesting to them, particularly reading extensively without using dictionaries can be very beneficial because

- students will have a chance to practice reading skills and strategies,
- students can do sustained silent reading which can build fluency (automaticity) and appreciation of reading, and



- students can concentrate on reading with longer periods which can build vocabulary and structural awareness, enhance background knowledge, improve comprehension skills and promote confidence and motivation (Grabe 1991).

This research will hopefully turn students into better EFL readers with self-confidence so that they can read FL materials as well as establishing a good reading habit for their life-long learning. Most importantly, the end result will be a good starting point in allowing EFL teachers in Thailand to consider the importance of extensive reading and adopt it as an integrated part of every regular English language curriculum

Therefore, I would like your permission to conduct the research through Rajamangala University of Technology Thanyaburi (RMUTT) by using the English 2 students as my research subject groups.

The research project is divided into two phrases as follows.

*Phrase 1:* The six-week pilot study will commence on 14 January 2008 and ends on 24 February 2008.

*Phrase 2:* The four-month experimental study will be conducted in the 1<sup>st</sup> semester of the academic year 2008.

As mentioned above, this request is for second half of the 2<sup>nd</sup> semester of this academic year 2007, as well as for the 1<sup>st</sup> semester of the academic year 2008, and for the following course:

- Department: Department of Western Languages
- Course number and title: English 2 (013-201-102)
- Section number: 88 sections (3,556 students) in this semester (2/2007)
- Number of students in the class: 30-60
- The total participants which will be recruited: 240.
- The total classes required: 6 classes (sections)
- The subject groups: the existing groups enrolled in English 2

I will follow the same regular English 2 syllabus and use the graded readers, simplified short stories written for EFL learners, as a supplementary material in my class for students to read as an outside reading including the activities to supplement my instruction of the English 2 classes. The students will not be required to purchase the graded readers books since these books have been funded by RMUTT due to my request of the funding for the main research instrument.

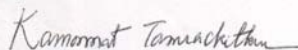
I would like to assure you that this research project has been reviewed and received ethical approval through the Research Governance and Ethics Sub-Committee (RGEC) at the University of Salford. Due to the regulation for the protection of human subject required that informed consent information be presented in "language understandable to the subject," and that informed consent be documented in writing, the subjects will be presented with a consent document written in the Thai language understandable to them. Oral presentation of informed consent information will also be presented by me in conjunction with the written document prior to this experimental study.

However, if after receiving this letter, you have any questions about this study, or would like additional information to assist you in reaching a decision about permission, please feel free to contact Dr. Siân Etherington at [s.etherington@salford.ac.uk](mailto:s.etherington@salford.ac.uk), Tel: +44 (0) 161 295 5648, Fax: +44 (0) 161 295 5335; Mr Huw Jarvis at [h.a.jarvis@salford.ac.uk](mailto:h.a.jarvis@salford.ac.uk).

<http://www.freewebs.com/huwjarvis>, Tel: +44 (0) 161 295 3611, Fax: +44 (0) 161 295 5335 or Miss Kamonnat Tamrackitkun at [tkamonnat@hotmail.com](mailto:tkamonnat@hotmail.com),  
[K.Tamrackitkun@pgr.salford.ac.uk](mailto:K.Tamrackitkun@pgr.salford.ac.uk), Tel: +44 (0) 079 42 558 041, Mobile: 084 539 4738.

Thank you very much for your valuable time and I sincerely appreciate your consideration of this matter. I would be most grateful your permission to my request and greatly appreciate if you would sign the attached Administrator's Letter of Approval that indicates your approval of this permission.

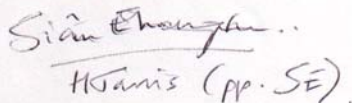
Yours sincerely,



Miss Kamonnat Tamrackitkun  
PhD student in TEFL  
University of Salford, UK

#### Supervisors' Declaration

We hereby confirm that the supervisors have approved the doctoral dissertation research project of Miss Kamonnat Tamrackitkun. All the information provided in this requested permission letter to conduct research at Rajamangala University of Technology Thanyaburi (RMUTT) is true and correct.



Dr. Siân Etherington  
Mr Huw Jarvis  
(joint supervisor)

## Appendix A3: Administrator's Letter of Approval (RMUTT)

Administrator's Letter of Approval

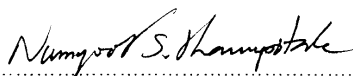
Rajamangala University of Technology Thanyaburi (RMUTT)

28 December 2007

To Whom It May Concern:

I, Assoc. Prof. Dr. Numyoot Songthanapitak, President of Rajamangala University of Technology Thanyaburi (RMUTT), hereby give permission for Miss Kamonnat Tamrackitkun to conduct her doctoral research project on the premise of the above-name university with 240 selected English 2 students.

I understand and accept the request that this project will take place between 14<sup>th</sup> January 2008 to 24<sup>th</sup> February 2008 (the 2<sup>nd</sup> semester of this academic year 2007) as a preliminary study and between 2<sup>nd</sup> June to 30<sup>th</sup> September 2008 (1<sup>st</sup> semester of the forthcoming academic year 2008) as a main research. Prior to students participating in this research project, informed consent of students will be obtained.



(Assoc. Prof. Numyoot Songthanapitak, Ph.D.)  
President of Rajamangala University  
of Technology Thanyaburi,  
Ministry of Education, Thailand.

## **Appendix A4: Informed Consent of Subject to Participate in a Research Project:**

### **Extensive reading: An empirical study of its effects on EFL Thai students' reading comprehension, reading fluency, and attitudes**

**Researcher:** Miss Kamonnat Tamrackitkun    **Telephone:** UK    +44 078 186 30 662  
Thailand +66 085 359 4198

**E-mail:**

K.Tamrackitkun@pgr.salford.ac.uk

tkamonnat@hotmail.com

**Sponsor:** Rajamangala University of Technology Thanyaburi (RMUTT)

Dear English 2 students,

#### **Introduction**

You are invited to consider participating in this research study of the effectiveness of extensive reading (ER), an approach in foreign language learning. My name is Kamonnat Tamrackitkun. I am a graduate student at the University of Salford, in the School of Languages, UK. This study is a part of my dissertation research. This form will describe the purpose and nature of the study and your right as a participant of the study. The decision to participate or not is yours. If you do not wish to participate, you can study your course book, English 2 in class. If you decide to participate, please tick the box, write your name clearly and sign it at the end of this form.

#### **Purpose of the Study**

The purpose of the study is to investigate whether reading at least one simplified short stories (graded reader) per week within one month in the pilot study and within one semester in the main study will be beneficial to English 2 students' reading comprehension and reading fluency as well as positive attitudes.

#### **Total Number of Participants**

About 240 students will take part in this study. You and the other members of your class are selected as possible participants in this study because you are English 2 students. You will be one of the 240 students chosen to participate in this study. I will be comparing the performance of English as a foreign language (EFL) learners on exposure to extensive reading to those with no exposure to extensive reading at this university, RMUTT.

#### **Explanation and Plan of the Study**

- You will study with the researcher for one semester in English 2 course.
- You are required to read at least one simplified short story (graded reader) per week within one semester (approximately 15 books in total) and take 15 reading fluency tests in normal class.
- If you do not participate, you can practice reading from Reading Laboratory Kits (SRA ) -- short passages, answering questions on each "Power Builder" and "Rate Builder" card, checking your answers with the answer cards, and recording your scores on the individual SRA progress sheets at the Self-Access Language Learning Center (SALLC) on the 6<sup>th</sup> floor of the Faculty of Liberal Arts.
- We will follow the same syllabus stated in the university curriculum and use the same course book—Straightforward: pre-intermediate student's book (Philip Kerr 2005) and take the same departmental language test as the other English 2 sections.
- Extensive reading will be done in your regular class under the supervision of the researcher for 30 minutes of the regular class, 3-hour period per week for 15 weeks,

excluding two weeks for midterm and final examination that all sections of English 2 are to take.

- As part of the study, you will take a pretest before the study commences.
- At the end of the semester, you will take a posttest, complete a questionnaire on attitude towards extensive reading and have a 15-minute interview on your opinion about ER.
- The interview will be conducted orally in a one-to-one situation at the university.
- The test will take about 2.30 hours and the questionnaire will take about 15 minutes to complete. A tape recorder will be used to record your opinions during the interview.

**Length of the Study:** The study will last for 4 weeks (one semester).

**Timetable of Measurement** (before and after Midterm Exam of academic year 2008)

Week/Date	Measurement	hour	Target Books
1/ Mon 10- Sun 16 Nov 2008	Pretest Questionnaire Interview	2.30 0.15 0.15	-
2 – 16/10 Nov 08 - 16 (- 22) Feb09	Reading fluency test	0.15	15
16/Mon 16 – Sun 22 Feb 2009	Posttest Questionnaire Interview	2.30 0.15 0.15	-
7/Mon 23 Feb – Sun 8 Mar 2009	<i>Final Exam of RMUTT</i>	2.00	-

### Confidentiality

- All of the information that is obtained in connection with this study and that can be linked to you or identify you will be confidential and will be disclosed only with your permission and will only be used for research purposes.
- This means that your identity will be anonymous; in other words, no one besides the researcher will know your name.
- In the transcriptions, the analysis and the final research report all names and identities will be anonymised (the name and place will be change).
- If you are audiotaped, the tape as well as your other details will be retained by the researcher in a locked filing cabinet and key held by the researcher.
- Once the study and the dissertation have been completed, the tapes will be destroyed.

### Data Security

- The data will be stored on a computer, and only the researcher will have access to it.

### New Findings

If you would like me to, I will contact you to explain the results of the study after the study has been concluded.

### Your Right as a Participation

- Participating in this study is strictly voluntary.

- Your decision whether or not to participate will not affect your present and future relations with your teacher, the researcher and Rajamangala University of Technology Thanyaburi (RMUTT).
- If you decide to participate, you are free to discontinue participation at any time. Your decision to participate will in no way affect your final grade.
- If you do not participate, you can study your course book in class.
- If at any point you change your mind and no longer want to participate, you can tell the researcher. You can withdraw without a detriment.
- You will not be paid for participating in this study.

You are making a decision whether or not to participate, your signature indicates that you have read the information provided above and have decided to participate. You may withdraw at any time after signing this form, should you choose to discontinue participation in this study.

If you have any questions or concerns about the research, please ask me. If you have any additional questions later, you can contact me directly by telephone at 085 359 4198, by e-mail [tkamonnat@hotmail.com](mailto:tkamonnat@hotmail.com) or [K.Tamrackitkun@pgr.salford.ac.uk](mailto:K.Tamrackitkun@pgr.salford.ac.uk), or in person at the office in the Faculty of Liberal Arts, 3<sup>rd</sup> floor, Department of Foreign Languages, Rajamangala University of technology Thanyaburi, or contact my supervisors, Dr Siân Etherington and Mr Huw Jarvis, the School of Languages, University of Salford, Greater Manchester, United Kingdom, by email [s.etherington@salford.ac.uk](mailto:s.etherington@salford.ac.uk), [h.a.jarvis@salford.ac.uk](mailto:h.a.jarvis@salford.ac.uk). We will be happy to answer them.

Thank you for your consideration. To access research results, please contact me.

### Researcher's statement

I have verbally explained this study to the student. I have discussed the activities and have answered all of the questions that the student asked.

Signature of researcher Miss Kamonnat Tamrackitkun Date 4/11/09

If you decide to participate, please tick one box below to show whether you wish to take part or not. After signing your name and date, please write your name, group and student code, on the last line of this form.

### Learner's consent

I have read the information provided in this Informed Consent Form. I fully understand the procedure described above. I understand that confidentiality will be guaranteed and I may withdraw from the project at any time. All my questions were answered to my satisfaction.

YES, I willingly consent to participate in this study.

NO, I do not give my consent.

Signature of participant \_\_\_\_\_ Date \_\_\_\_\_

Name of participant \_\_\_\_\_ Group \_\_\_\_\_ Student Code \_\_\_\_\_  
(Please write clearly)

## Appendix A5: Consent Form for Control Groups 1 (Pre- & Post-Test)

I agree to participate in a research project being conducted by Miss Kamonnat Tamrackitkun, a PhD student from the University of Salford's School of Languages who is working under the supervision of Dr Siân Etherington who can be reached at Tel: +44 (0) 161 295 5648 or [s.etherington@salford.ac.uk](mailto:s.etherington@salford.ac.uk), and Mr. Huw Jarvis at Tel: +44 (0) 161 295 3611 or [h.a.jarvis@salford.ac.uk](mailto:h.a.jarvis@salford.ac.uk).

I understand that the purpose of this research project is to investigate the effectiveness of extensive reading as an approach employed to teach English reading for Thai university students studying English as a foreign language at Rajamangala University of Technology Thanyaburi (RMUTT), Thailand in the academic year 2008.

I understand that my participation will involve taking the test of reading comprehension in English in the first week of the semester and the last week before the final examination and 15 reading fluency tests in normal class of this 2<sup>nd</sup> semester in this academic year 2008.

I understand that only the results of the reading fluency tests will be accounted 5 percent of my English 2 scores.

I understand that participation is voluntary and I have been informed that I may withdraw at any time without negative consequences or penalty to me by informing the researcher.

I understand that my name will not be revealed in any reports or presentations. That is anonymity will be secured by the use of pseudonyms for students in all forms of project dissemination.

I understand that the data collected will be stored in a locked filing cabinet of which the key is held by the researcher and on the researcher's computer. The data will be used in the study and will be destroyed after the research dissertation is completed.

I will be asked to sign an informed consent form translated into the Thai language before the study commences. This will be made clear in the written information and will be explained verbally as well.

I am aware that this study has been reviewed by, and received ethical approval through, the Research Governance and Ethics Sub-Committee (RGEC) at the University of Salford, and that I can contact the researcher at Tel: 085 359 4198 or [tkamonnat@hotmail.com](mailto:tkamonnat@hotmail.com), Dr Siân Etherington or Mr. Huw Jarvis at the above telephone numbers and emails if I have any questions or concerns about the research or any comments resulting from my participation.

I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT.

I AGREE TO PARTICIPATE IN THE PROJECT UNDER THE CONDITIONS DESCRIBED ABOVE.

Participant Name: \_\_\_\_\_  
(Please write clearly)

Participant Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## Appendix A6: Consent Form for Control Group 2 (Post-Test Only)

I agree to participate in a research project being conducted by Miss Kamonnat Tamrackitkun, a PhD student from the University of Salford's School of Languages who is working under the supervision of Dr Siân Etherington who can be reached at Tel: +44 (0) 161 295 5648 or [s.etherington@salford.ac.uk](mailto:s.etherington@salford.ac.uk), and Mr. Huw Jarvis at Tel: +44 (0) 161 295 3611 or [h.a.jarvis@salford.ac.uk](mailto:h.a.jarvis@salford.ac.uk).

I understand that the purpose of this research project is to investigate the effectiveness of extensive reading as an approach employed to teach English reading for Thai university students studying English as a foreign language at Rajamangala University of Technology Thanyaburi (RMUTT), Thailand in the academic year 2008.

I understand that my participation will involve taking the test of reading comprehension in English in the last week before the final examination and 15 reading fluency tests in normal class of this 2<sup>nd</sup> semester in this academic year 2008.

I understand that only the results of the reading fluency tests will be accounted 5 percent of my English 2 scores.

I understand that participation is voluntary and I have been informed that I may withdraw at any time without negative consequences or penalty to me by informing the researcher.

I understand that my name will not be revealed in any reports or presentations. That is anonymity will be secured by the use of pseudonyms for students in all forms of project dissemination.

I understand that the data collected will be stored in a locked filing cabinet of which the key is held by the researcher and on the researcher's computer. The data will be used in the study and will be destroyed after the research dissertation is completed.

I will be asked to sign an informed consent form translated into the Thai language before the study commences. This will be made clear in the written information and will be explained verbally as well.

I am aware that this study has been reviewed by, and received ethical approval through, the Research Governance and Ethics Sub-Committee (RGEC) at the University of Salford, and that I can contact the researcher at Tel: 085 359 4198 or [tkamonnat@hotmail.com](mailto:tkamonnat@hotmail.com), Dr Siân Etherington or Mr. Huw Jarvis at the above telephone numbers and emails if I have any questions or concerns about the research or any comments resulting from my participation.

I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT.

I AGREE TO PARTICIPATE IN THE PROJECT UNDER THE CONDITIONS DESCRIBED ABOVE.

Participant Name: \_\_\_\_\_  
(Please write clearly)

Participant Signature: \_\_\_\_\_

Date: \_\_\_\_\_



## Appendix A7: Consent Form for In-Person Interview

In signing this document, I am giving my consent to be interviewed as part of a research study being conducted by Miss Kamonnat Tamrackitkun, a PhD student from the University of Salford's School of Languages who is working under the supervision of Dr Siân Etherington who can be reached at Tel: +44 (0) 161 295 5648 or [s.etherington@salford.ac.uk](mailto:s.etherington@salford.ac.uk), and Mr. Huw Jarvis at Tel: +44 (0) 161 295 3611 or [h.a.jarvis@salford.ac.uk](mailto:h.a.jarvis@salford.ac.uk). The information I share in the interview will help the researcher better understand the effectiveness of extensive reading on the attitude of Thai university students studying English as a foreign language at Rajamangala University of Technology Thanyaburi (RMUTT), Thailand in the academic year 2007.

I understand that I will be interviewed at RMUTT and at a time convenient to me in the last week before the final examination of this 2<sup>nd</sup> semester in this academic year 2008. The interview will take about 20 minutes to complete and it will be tape-recorded.

I understand that I only need to say what I feel comfortable in saying.

I understand that participation is voluntary and I have been informed that I may withdraw during the interview process without negative consequences or penalty to me by informing the researcher.

I understand that all information will be kept confidential. My name will not be identified in any reports or presentations. That is anonymity will be secured by the use of pseudonyms for students in all forms of project dissemination. Data (audiotapes and transcripts) will be kept locked in a secure location accessible only to the researcher. It will be stored in a locked filing cabinet of which the key is held by the researcher and on the researcher's computer. The data will be used in the study and will be destroyed after the research dissertation is completed.

I understand that the results of this study may be published in journals and that some direct quotes from my interview may be used. However, my name will not be identified in any quotes.

I will be asked to sign an informed consent form translated into the Thai language before the interview commences. This will be made clear in the written information and will be explained verbally by the researcher as well.

I am aware that this study has been reviewed by, and received ethical approval through, the Research Governance and Ethics Sub-Committee (RGEC) at the University of Salford, and that I may contact the researcher at Tel: 085 359 4198 or [tkamonnat@hotmail.com](mailto:tkamonnat@hotmail.com), Dr Siân Etherington or Mr. Huw Jarvis at the above telephone numbers and emails if I have any questions or concerns about the research, and if I ask for the results of this study.

I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT.  
I AGREE TO PARTICIPATE IN THE PROJECT UNDER THE CONDITIONS DESCRIBED ABOVE.

Participant Name: \_\_\_\_\_  
(Please write clearly)

Participant Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Appendix B: Graded Readers B1: Graded Readers Used in the Study**

<b>I CAMBRIDGE English Readers</b> (Series editor: Philip Prowse)						
<b>No</b>	<b>Title</b>	<b>Author</b>	<b>Genre</b>	<b>Level</b>	<b>Note</b>	<b>Copy</b>
1	A Death in Oxford	Richard MacAndrew	Murder mystery	S:Starter/Begin	BE	1
2	The Girl at the Window	Antoinette Moses	Ghost story	S:Starter/Begin	BE	1
3	The Penang File	Richard MacAndrew	Thriller	S:Starter/Begin	BE	1
4	Bad Love	Sue Leather	Murder mystery	1:Beginner/Ele		2
5	Blood Diamond	Richard MacAndrew	Thriller	Level 1		2
6	Hotel Casanova	Sue Leather	Romance	1:Beginner/Ele		5
7	Inspector Logan	Richard MacAndrew	Murder mystery	Level 1		4
8	John Doe	Antoinette Moses	Murder mystery	Level 1		2
9	Next Door to Love	Margaret Johnson	Romance	Level 1		3
10	Parallel	Colin Campbell	Thriller	Level 1		1
11	Three Tomorrows	Frank Brennan	Short stories	1:Beginner/Ele		1
12	Apollo's Gold	Antoinette Moses	Adventure	Level 2		1
13	Dead Cold	Sue Leather	Murder mystery	2:Elementary	AE	1
14	The Mask of Zoro	Johnston		3:Elementary		3 with audio CD
15	Different Worlds	Margaret Johnson	Romance	2:Level 2		2
16	The Double Bass Mystery	Jeremy Harmer	Murder mystery	2:Level 2		1
17	Jojo's Story	Antoinette Moses	Human interest	2:Level 2		1
18	Logan's Choice	Richard MacAndrew	Murder mystery	2:Level 2		4
19	The Man from Nowhere	Bernard Smith	Thriller	2:Level 2		5
20	Strong Medicine	Richard MacAndrew	Murder mystery	3:Lower-intermediate		1
21	The Beast	Carolyn Walker	Horror	3:Level 3		3
22	Eye of the Storm	Mandy Loader	Thriller	3:Level 3		4
23	The Lahti File	Richard MacAndrew	Thriller	3:Level 3		2
24	The Amsterdam Connection	Sue Leather	Murder mystery	4:Intermediate		2
25	But Was it Murder?	Jania Barrrell	Murder mystery	4:Intermediate	BE	3
26	A Matter of Chance	David A. Hill	Thriller	4:Intermediate	BE	2
27	The Fruitcake Special & Other Stories	Frank Brennan	Short stories	4:Level 4		2
28	High Life, Low Life	Alan Battersby	Thriller	4:Level 4		2
29	The Lady in White	Colin Campbell	Ghost story	4:Intermediate	BE	3
30	Nothing but the Truth	George Kershaw	Adventure	4:Level 4	BE	2
31	Staying Together	Judith Wilson	Romance	4:Intermediate		4
32	The University Murders	Richard MacAndrew	Murder mystery	4:Intermediate		2
33	When Summer Comes	Helen Naylor	Romance	4:Intermediate		2

No	Title	Author	Genre	Level	Note	Copy	
34	All I Want	Margaret Johnson	Romance	5:Upper-intermediate		2	
35	A Tangled Web	Alan Maley	Thriller	5:Level 5		2	
36	Dolphin Music	Antoinette Moses	Future thriller	5:Level 5		2	
37	East 43rd Street	Alan Battersby	Thriller	5:Level 5		2	
38	Emergency Murder	Janet McGiffin	Thriller	5:Upper-intermediate		2	
39	In the Shadow of the Mountain	Helen Naylor	Human interest	5:Upper-intermediate	BE	2	
40	Windows of the Mind	Frank Brennan	Short stories	5:Upper-intermediate	BE	2	
41	The Sugar Glider	Rod Neilsen	Adventure	5:Level 5		2	
42	A Love for Life	Penny Hancock	Romance	6:Level 6		2	
43	Deadly Harvest	Carolyn Walker	Murder mystery	6:Level 6		3	
44	Frozen Pizza and Other Slices of Life	Antoinette Moses	Short stories	6:Level 6		3	
45	He Knows Too Much	Alan Maley	Human interest	6:Level 6		2	
46	Murder Maker	Margaret Johnson	Thriller	6:Level 6		2	
47	This Time It's Personal	Alan Battersby	Thriller	6:Level 6		2	
<b>II MACMILLAN Readers</b>							
48	Anna and the Fighter	Elizabeth Laird		2:Beginner	BE	4	with audio CD
49	Bad Love	Sue Leather	Murder mystery	2:Beginner		1	
50	The Long Tunnel	John Milne		2:Beginner	BE	4	with audio CD
51	Money for a Motorbike	John Milne		2:Beginner	BE	2	with audio CD
52	Rich Man, Poor Man	T.C. Jupp		2:Beginner	BE	2	with audio CD
53	The Adventure of Tom Sawyer	Mark Twain		2:Beginner	BE	3	with audio CD
54	Jane Eyre	Charlotte Brontë		2:Beginner	BE	3	with audio CD
55	The Last of the Mohigans	James Fenimore Cooper		2:Beginner	BE	3	with audio CD
56	Little Women	Louisa M. Alcott		2:Beginner	BE	2	with audio CD
57	The Phantom of the Opera	Gaston Leroux		2:Beginner	BE	2	with audio CD
58	A Tale of Two Cities	Charles Dickens		2:Beginner	BE	3	with audio CD
59	The Picture of Dorian Gray	Oscar Wilde		3:Elementary	BE	4	with audio CD
60	The Princess Diaries	Meg Cabot		3:Elementary	AE	2	with audio CD
61	The Black Cat	John Milne		3:Elementary	BE	1	
62	The Black Cat	John Milne		3:Elementary	BE	1	with audio CD
63	The Princess Diaries 3	Meg Cabot		4:Pre-intermediate	AE	1	with audio CD
64	The Princess Diaries 4	Meg Cabot		4:Pre-intermediate	AE	1	with audio CD

No	Title	Author	Genre	Level	Note	Copy	
<b>III OXFORD Bookworms Library</b>							
65	Aladdin and the Enchanted Lamp	Retold by Judith Dean	Fantasy & Horror	Stage 1	400 headwords	4	
66	The Coldest Place on Earth	Tim Vicary	True stories	Stage 1	400 headwords	3	
67	Goodbye Mr Hollywood	John Escott	Thriller & Adventure	Stage 1	400 headwords	4	
68	The Lottery Winner	Rosemary Border	Human interest	Stage 1	400 headwords	2	
69	Love or Money?	Rowena Akinyemi	Crime & Mystery	Stage 1	400 headwords	4	
70	Mutiny on the Bounty	Tim Vicary	True stories	Stage 1	400 headwords	2	
71	Ned Kelly: a true story	Christine Lindop	True stories	Stage 1	400 headwords	7	
72	The Omega Files: short stories	Jennifer Bassett	Fantasy & Horror	Stage 1	400 headwords	5	
73	One-Way Ticket: short stories	Jennifer Bassett	Human interest	Stage 1	400 headwords	3	
74	The President's Murderer	Jennifer Bassett	Thriller & Adventure	Stage 1	400 headwords	4	
75	The Witches of Pendle	Rowena Akinyemi	True stories	Stage 1	400 headwords	3	
76	The Withered Arm	Thomas Hardy	Classic	Stage 1	400 headwords	2	
77	Alice's Adventure in Wonderland	Lewis Carroll	Classic	Stage 2	700 headwords	5	
78	The Canterville Ghost	Oscar Wilde	Fantasy & Horror	Stage 2	700 headwords	1	
79	Ear-Rings from Frankffurt	Reg Wright	Thriller & Adventure	Stage 2	700 headwords	2	
80	Grace Darling	Tim Vicary	True stories	Stage 2	700 headwords	2	
81	Henry VIII and His Wives	Janet Hardy-Gould	True stories	Stage 2	700 headwords	1	
82	The Jungle Book	Rudyard Kipling	Classic	Stage 2	700 headwords	5	
83	Love among the Haystacks	D.H. Lawrence	Classic	Stage 2	700 headwords	2	
84	The Love of a King	Peter Dainty	True stories	Stage 2	700 headwords	1	
85	The Murders in the Rue Morgue	Edgar Allan Poe	Crime & Mystery	Stage 2	700 headwords	2	
86	The Pit and the Pendulum	Edgar Allan Poe	Fantasy & Horror	Stage 2	700 headwords	3	
87	Return to Earth	John Christopher	Fantasy & Horror	Stage 2	700 headwords	2	
88	Stories from the Five Towns	Arnold Bennett	Human interest	Stage 2	700 headwords	2	
89	Voodoo Island	Michael Duckworth	Fantasy & Horror	Stage 2	700 headwords	3	
90	The Year of Sharing	Harry Gilbert	Fantasy & Horror	Stage 2	700 headwords	2	
91	Justice	Tim Vicary	Thriller & Adventure	Stage 3	1000 headwords	5	
92	The Last Sherlock Holmes Story	Michael Dibdin	Crime & Mystery	Stage 3	1000 headwords	1	
93	Love Story	Erich Segal	Human interest	Stage 3	1000 headwords	3	
94	On the Edge	Gillian Cross	Thriller & Adventure	Stage 3	1000 headwords	4	
95	Skyjack!	Tim Vicary	Thriller & Adventure	Stage 3	1000 headwords	2	
96	Tales of Mystery and Imagination	Edgar Allan Poe	Fantasy & Horror	Stage 3	1000 headwords	5	
97	The Prisoner of Zenda	Anthony Hope	Thriller & Adventure	Stage 3	1000 headwords	3	
98	The Picture of Dorian Gray	Oscar Wilde	Fantasy & Horror	Stage 3	1000 headwords	3	
99	The Three Strangers and Other Stories	Thomas Hardy	Classic	Stage 3	1000 headwords	4	
100	Tooth and Claw:short stories	Saki	Human interest	Stage 3	1000 headwords	5	

No	Title	Author	Genre	Level	Note	Copy
101	Who, Sir? Me, Sir?'	K.M. Peyton	Human interest	Stage 3	1000 headwords	5
102	Wyatt's Hurricane	Desmond Bagley	Thriller & Adventure	Stage 3	1000 headwords	4
103	A Dubious Legacy	Mary Wesley	Human interest	Stage 3	1000 headwords	2
104	Cranford	Elizabeth Gaskell	Classic	Stage 4	1400 headwords	2
105	Death of an Englishman	Magdalen Nabb	Crime & Mystery	Stage 4	1400 headwords	2
106	The Eagle of the Ninth	Rosemary Sutcliff	Thriller & Adventure	Stage 4	1400 headwords	2
107	The Moonspinners	Mary Stewart	Thriller & Adventure	Stage 4	1400 headwords	2
108	The Whispering Knights	Penelope Lively	Fantasy & Horror	Stage 4	1400 headwords	2
109	The Thirty-Nine Steps	John Buchan	Thriller & Adventure	Stage 4	1400 headwords	2
110	Mr Midshipman Hornblower	C.S. Forester	Thriller & Adventure	Stage 4	1400 headwords	2
111	A Tale of Two Cities	Charles Dickens	Classic	Stage 4	1400 headwords	2
112	The Unquiet Grave: short stories	M.R. James	Fantasy & Horror	Stage 4	1400 headwords	1
113	Far from the Madding Crowd	Thomas Hardy	Classic	Stage 5	1800 headwords	2
114	Heat and Dust	Ruth Praver Jhabvala	Human interest	Stage 5	1800 headwords	2
115	Jeeves and Friends-Short Stories	P.G. Wodehouse	Human interest	Stage 5	1800 headwords	2
116	The Dead of Jericho	Colin Dexter	Crime & Mystery	Stage 5	1800 headwords	2
117	The Edge of Innocence	Edith Wharton	Classic	Stage 5	1800 headwords	2
118	The Riddle of the Sands	Erskine Childers	Thriller & Adventure	Stage 5	1800 headwords	2
119	The Rough Magic	Mary Stewart	Thriller & Adventure	Stage 5	1800 headwords	1
120	Deadheads	Reginald Hill	Crime & Mystery	Stage 6	2500 headwords	2
121	Dublin People-Short Stories	Maeve Binchy	Human interest	Stage 6	2500 headwords	2
122	The Joy Luck Club	Amy Tan	Human interest	Stage 6	2500 headwords	2
<b>IV PENGUIN Readers</b> (Series editors: Andy Hopkins and Jocelyn Potter)						
123	Extreme Sports	Michael Dean	Original	2:Elementary (AE)	600 words	1
124	Football Clubs of South America	Rod Smith	Original	2:Elementary (AE)	600 words	1
125	Nelson Mandela	Colleen Degnan-Veness	Original	2:Elementary (BE)	600 words	3
126	Project Omega	Elaine O'Reilly	Original	2:Elementary (BE)	600 words	2
127	The Storm	Elizabeth Laird	Original	2:Elementary (BE)	600 words	3
128	Anne Green of Gablles	L.M. Montgomery	Original	2:Elementary (AE)	600 words	4
129	The Birds	Daphne du Maurier	Comtemporary	2:Elementary (BE)	600 words	2
130	Black Beauty	Anna Sewell	Classic	2:Elementary (BE)	600 words	1
131	A Christmas Carol	Charles Dickens	Classic	2:Elementary (BE)	600 words	4
132	The Fox	D.H. Lawrence	Classic	2:Elementary (BE)	600 words	6
133	Jaws	Peter Bnchley	Comtemporary	2:Elementary (BE)	600 words	4
134	Of Mice and Men	John Steinbeck	Classic	2:Elementary (AE)	600 words	3
135	Robinson Crusoe	Daniel Defoe	Classic	2:Elementary (BE)	600 words	5
136	The Scarlet Letter	Nathaniel Hawthorne	Classic	2:Elementary (AE)	600 words	1

No	Title	Author	Genre	Level	Note	Copy	
137	Small Soldiers	Gavin Scott	Original	2:Elementary (AE)	600 words	1	
138	Stranger than Fiction Urban Myths	Phil Healey & Rick Glanvill	Original	2:Elementary (BE)	600 words	4	
139	Tales from the Arabian Night	Retold by Anne Collins	Classic	2:Elementary (BE)	600 words	2	
140	Under the greenwood Three	Thomas Hardy	Classic	2:Elementary (BE)	600 words	5	
141	Walkabout	James Vance Marshall	Comtemporary	2:Elementary (BE)	600 words	5	
142	The Wave	Morton Rhue	Comtemporary	2:Elementary (BE)	600 words	1	
143	The Weirdo	Theodore Taylor	Comtemporary	2:Elementary (BE)	600 words	4	
144	White Fang	Jack London	Classic	2:Elementary (AE)	600 words	7	
145	The Climb	John Escott	Original	3:Pre-Inter(BE)	1200 words	3	
146	Island of the Blue Dolphin	Scott O'Dell	Comtemporary	3:Pre-Inter(BE)	1200 words	5	
147	Manchester United	Kevin Brophy	Original	3:Pre-Inter(BE)	1200 words	3	
148	Matilda Roald Dahl	Retold by John Escott	Comtemporary	3:Pre-Inter(BE)	1200 words	3	
149	My Fair Lady	Alan Jay Lerner	Comtemporary	3:Pre-Inter(BE)	1200 words	2	
150	Sherlock Holmes & the Mystery of Boscombe Pool	Arthur Conan Doyle	Classic	3:Pre-Inter(BE)	1200 words	2	
151	Titanic	Paul Shipton	Original	3:Pre-Inter(AE)	1200 words	3	
152	The Turn of the Screw	Henry James	Classic	3:Pre-Inter(BE)	1200 words	1	
153	The Swiss Family Robinson	Johann Wyss	Classic	3:Pre-Inter(BE)	1200 words	1	
154	As Time Goes by	Michael Walsh	Comtemporary	4:Intermediate (AE)	1700 words	2	
155	Crime Story Collection	Sara Paretsky & Others	Comtemporary	4:Intermediate (BE)	1700 words	1	
156	The Burden of Prove	Scott Turow	Comtemporary	4:Intermediate (BE)	1700 words	2	
157	The Client	John Grisham	Comtemporary	4:Intermediate (BE)	1700 words	2	
158	Evening Class	Maeve Binchy	Comtemporary	4:Intermediate (AE)	1700 words	3	
159	The Go-Between	L.P. Hartley	Classic	4:Intermediate (BE)	1700 words	1	
160	The Godfather	Mario Puzo	Comtemporary	4:Intermediate (BE)	1700 words	2	
161	Inventions that Changed the World	David Maule	Original	4:Intermediate (AE)	1700 words	2	
162	The Lost World: Jurassic Park	David Maule	Original	4:Intermediate (AE)	1700 words	1	
163	The Mill on the Floss	Retold by Janet McAlpin	Comtemporary	4:Intermediate (AE)	1700 words	2	
164	On the Beach	Nevil Shute	Comtemporary	4:Intermediate (BE)	1700 words	2	
165	Jane Eyre	Charlotte Brontë	Classic	5:Upper Inter(BE)	2300 words	2	
166	Stories of Detection and Mystery	Agatha Christie & Others	Classic	5:Upper Inter(BE)	2300 words	2	
167	Taste and Other Tales	Roald Dahl	Comtemporary	5:Upper Inter(BE)	2300 words	2	
168	Tales of Mystery and Imagination	Edgar Allan Poe	Classic	5:Upper Inter(BE)	2300 words	2	
169	The Brethren	John Grisham	Comtemporary	5:Upper Inter(AE)	2300 words	2	
170	The Citadel	A.J. Cronin	Comtemporary	5:Upper Inter(AE)	2300 words	2	
171	The Firm	John Grisham	Comtemporary	5:Upper Inter(AE)	2300 words	2	

No	Title	Author	Genre	Level	Note	Copy	
172	The Great Gatsby	F. Scott Fitzgerald	Classic	5:Upper Inter(BE)	2300 words	2	
173	The Moneymaker	Janet Gleeson	Comtemporary	5:Upper Inter(AE)	2300 words	2	
174	Wuthering Heights	Emily Brontë	Classic	5:Upper Inter(BE)	2300 words	2	
<b>V The British Medical Association (Family Doctor Series)</b>							
175	Understanding Allergies	Dr Joanne Clough				1	
176	Understanding Cholesterol	Dr Mike Laker				1	
177	Understanding Coronary Heart Disease	Dr Chris Davidson				1	
178	Understanding Depression	Dr Kwame McKenzie				1	
179	Understanding Forgetfulness & Dementia	Dr C.N. Martyn & Dr C.R. Gale				1	
180	Understanding Hip & Knee Arthritis Surgery	Mr Richard Villar				1	
181	Understanding Parkinson's Disease	Prof. Tony Schapira				1	
182	Understanding Sex	Dr Lynne Low				1	
183	Understanding SPORTS & Medicine	Prof. Greg McLatchie				1	
184	Understanding Urinary Incontinence	Prof. L.D. Cardozo & Mr P. Toozs-Hobson				1	
<b>Others: No place and year of publication</b>							
185	The Old Man and the Sea	Ernest Hemingway				1	

Note: BE = British English  
 AE = American English

**Appendix B2: Graded Readers Students Selected**

<b>I CAMBRIDGE English Readers</b>		Series editor: Philip Prowse			
<b>No</b>	<b>Title</b>	<b>Author</b>	<b>Genre</b>	<b>Level</b>	<b>Note</b>
1	A Death in Oxford	Richard MacAndrew	Murder mystery	S:Starter/Begin	British English
2	The Girl at the Window	Antoinette Moses	Ghost story	S:Starter/Begin	British English
3	The Penang File	Richard MacAndrew	Thriller	S:Starter/Begin	British English
4	Bad Love	Sue Leather	Murder mystery	1:Beginner/Ele	
5	Blood Diamond	Richard MacAndrew	Thriller	Level 1	
6	Hotel Casanova	Sue Leather	Romance	1:Beginner/Ele	
7	Inspector Logan	Richard MacAndrew	Murder mystery	Level 1	
8	John Doe	Antoinette Moses	Murder mystery	Level 1	
9	Next Door to Love	Margaret Johnson	Romance	Level 1	
10	Parallel	Colin Campbell	Thriller	Level 1	
11	Three Tomorrows	Frank Brennan	Short stories	1:Beginner/Ele	
12	Apollo's Gold	Antoinette Moses	Adventure	Level 2	
13	Dead Cold	Sue Leather	Murder mystery	2:Elementary	American English
14	Different Worlds	Margaret Johnson	Romance	2:Level 2	
15	The Double Bass Mystery	Jeremy Harmer	Murder mystery	2:Level 2	
16	Jojo's Story	Antoinette Moses	Human interest	2:Level 2	
17	Logan's Choice	Richard MacAndrew	Murder mystery	2:Level 2	
18	The Man from Nowhere	Bernard Smith	Thriller	2:Level 2	
19	But Was it Murder?	Jania Barrell	Murder mystery	4:Intermediate	British English
20	High Life, Low Life	Alan Battersby	Thriller	4:Level 4	
21	Nothing but the Truth	George Kershaw	Adventure	4:Level 4	British English
<b>II MACMILLAN Readers</b>					
22	Anna and the Fighter	Elizabeth Laird		2:Beginner	British English
23	The Long Tunnel	John Milne		2:Beginner	British English
24	Money for a Motorbike	John Milne		2:Beginner	British English
25	Rich Man, Poor Man	T.C. Jupp		2:Beginner	British English
26	The Adventure of Tom Sawyer	Mark Twain		2:Beginner	British English
27	Jane Eyre	Charlotte Brontë		2:Beginner	British English
28	The Last of the Mohigans	James Fenimore Cooper		2:Beginner	British English
29	Little Women	Louisa M. Alcott		2:Beginner	British English
30	The Phantom of the Opera	Gaston Leroux		2:Beginner	British English
31	The Picture of Dorian Gray	Oscar Wilde		3:Elementary	British English
32	The Princess Diaries	Meg Cabot		3:Elementary	American English



No	Title	Author	Genre	Level	Note
<b>III OXFORD Bookworms Library</b>					
33	Aladdin and the Enchanted Lamp	Retold by Judith Dean	Fantasy & Horror	Stage 1	400 headwords
34	The Coldest Place on Earth	Tim Vicary	True stories	Stage 1	400 headwords
35	Goodbye Mr Hollywood	John Escott	Thriller & Adventure	Stage 1	400 headwords
36	The Lottery Winner	Rosemary Border	Human interest	Stage 1	400 headwords
37	Love or Money?	Rowena Akinyemi	Crime & Mystery	Stage 1	400 headwords
38	Mutiny on the Bounty	Tim Vicary	True stories	Stage 1	400 headwords
39	Ned Kelly: a true story	Christine Lindop	True stories	Stage 1	400 headwords
40	The Omega Files: short stories	Jennifer Bassett	Fantasy & Horror	Stage 1	400 headwords
41	One-Way Ticket: short stories	Jennifer Bassett	Human interest	Stage 1	400 headwords
42	The President's Murderer	Jennifer Bassett	Thriller & Adventure	Stage 1	400 headwords
43	The Witches of Pendle	Rowena Akinyemi	True stories	Stage 1	400 headwords
44	The Withered Arm	Thomas Hardy	Classic	Stage 1	400 headwords
45	Alice's Adventure in Wonderland	Lewis Carroll	Classic	Stage 2	700 headwords
46	The Canterville Ghost	Oscar Wilde	Fantasy & Horror	Stage 2	700 headwords
47	Ear-Rings from Frankkfurt	Reg Wright	Thriller & Adventure	Stage 2	700 headwords
48	Grace Darling	Tim Vicary	True stories	Stage 2	700 headwords
49	Henry VIII and His Wives	Janet Hardy-Gould	True stories	Stage 2	700 headwords
50	The Jungle Book	Rudyard Kipling	Classic	Stage 2	700 headwords
51	Love among the Haystacks	D.H. Lawrence	Classic	Stage 2	700 headwords
52	The Love of a King	Peter Dainty	True stories	Stage 2	700 headwords
53	The Murders in the Rue Morgue	Edgar Allan Poe	Crime & Mystery	Stage 2	700 headwords
54	The Pit and the Pendulum	Edgar Allan Poe	Fantasy & Horror	Stage 2	700 headwords
55	Return to Earth	John Christopher	Fantasy & Horror	Stage 2	700 headwords
56	Stories from the Five Towns	Arnold Bennett	Human interest	Stage 2	700 headwords
57	Voodoo Island	Michael Duckworth	Fantasy & Horror	Stage 2	700 headwords
58	The Year of Sharing	Harry Gilbert	Fantasy & Horror	Stage 2	700 headwords
59	Justice	Tim Vicary	Thriller & Adventure	Stage 3	1000 headwords
60	Love Story	Erich Segal	Human interest	Stage 3	1000 headwords
61	On the Edge	Gillian Cross	Thriller & Adventure	Stage 3	1000 headwords
62	The Three Strangers and other stories	Thomas Hardy	Classic	Stage 3	1000 headwords
63	Tooth and Claw:short stories	Saki	Human interest	Stage 3	1000 headwords
64	Who, Sir? Me, Sir?'	K.M. Peyton	Human interest	Stage 3	1000 headwords
65	Wyatt's Hurricane	Desmond Bagley	Thriller & Adventure	Stage 3	1000 headwords
66	Mr Midshipman Hornblower	C.S. Forester	Thriller & Adventure	Stage 4	1400 headwords

No	Title	Author	Genre	Level	Note
<b>IV PENGUIN Readers</b>		Series editors:Andy Hopkins and Jocelyn Potter			
67	Extreme Sports	Michael Dean	Original	2:Elementary (AE)	600 words
68	Football Clubs of South America	Rod Smith	Original	2:Elementary (AE)	600 words
69	Nelson Mandela	Colleen Degnan-Veness	Original	2:Elementary (BE)	600 words
70	Project Omega	Elaine O'Reilly	Original	2:Elementary (BE)	600 words
71	The Storm	Elizabeth Laird	Original	2:Elementary (BE)	600 words
72	Anne Green of Gables	L.M. Montgomery	Original	2:Elementary (AE)	600 words
73	The Birds	Daphne du Maurier	Comtemporary	2:Elementary (BE)	600 words
74	Black Beauty	Anna Sewell	Classic	2:Elementary (BE)	600 words
75	A Christmas Carol	Charles Dickens	Classic	2:Elementary (BE)	600 words
76	The Fox	D.H. Lawrence	Classic	2:Elementary (BE)	600 words
77	Jaws	Peter Bnchley	Comtemporary	2:Elementary (BE)	600 words
78	Of Mice and Men	John Steinbeck	Classic	2:Elementary (AE)	600 words
79	Robinson Crusoe	Daniel Defoe	Classic	2:Elementary (BE)	600 words
80	The Scarlet Letter	Nathaniel Hawthorne	Classic	2:Elementary (AE)	600 words
81	Small Soldiers	Gavin Scott	Original	2:Elementary (AE)	600 words
82	Stranger than Fiction Urban Myths	Phil Healey & Rick Glanvill	Original	2:Elementary (BE)	600 words
83	Tales from the Arabian Night	Retold by Anne Collins	Classic	2:Elementary (BE)	600 words
84	Under the greenwood Three	Thomas Hardy	Classic	2:Elementary (BE)	600 words
85	Walkabout	James Vance Marshall	Comtemporary	2:Elementary (BE)	600 words
86	The Wave	Morton Rhue	Comtemporary	2:Elementary (BE)	600 words
87	The Weirdo	Theodore Taylor	Comtemporary	2:Elementary (BE)	600 words
88	White Fang	Jack London	Classic	2:Elementary (AE)	600 words
89	The Climb	John Escott	Original	3:Pre-Inter(BE)	1200 words
90	Island of the Blue Dolphin	Scott O'Dell	Comtemporary	3:Pre-Inter(BE)	1200 words
91	Manchester United	Kevin Brophy	Original	3:Pre-Inter(BE)	1200 words
92	Matilda Roald Dahl	Retold by John Escott	Comtemporary	3:Pre-Inter(BE)	1200 words
93	Titanic	Paul Shipton	Original	3:Pre-Inter(AE)	1200 words
94	The Turn of the Screw	Henry James	Classic	3:Pre-Inter(BE)	1200 words
95	The Swiss Family Robinson	Johann Wyss	Classic	3:Pre-Inter(BE)	1200 words
96	The Burden of Prove	Scott Turow	Comtemporary	4:Intermediate (BE)	1700 words
97	The Godfather	Mario Puzo	Comtemporary	4:Intermediate (BE)	1700 words
98	Inventions that Changed the World	David Maule	Original	4:Intermediate (AE)	1700 words
99	The Lost World: Jurassic Park	Retold by Janet McAlpin	Comtemporary	4:Intermediate (AE)	1700 words
100	Tales of Mystery and Imagination	Edgar Allan Poe	Classic	5:Upper Inter(BE)	2300 words
101	Understanding SPORTS & Medicine	Prof. Greg McLatchie			

### Appendix B3: Book Report Form

**Book Report Form:** Please fill this out even if you only read one page of the book.

Your name \_\_\_\_\_ No \_\_\_\_\_ Section \_\_\_\_\_ Date \_\_\_\_\_  
Title of the book \_\_\_\_\_  
Author \_\_\_\_\_  
Publisher \_\_\_\_\_ Level? 1 2 3 4 5

- I read all/ \_\_\_\_\_ pages of the book. (Circle "all" or indicate the number of pages read.)
- How long did it take to read? \_\_\_\_\_ hours \_\_\_\_\_ minutes
- What kind of writing is it? (circle one)  
Mystery, detective story, adventure story, science fiction story, love story, humorous story, biography, true story, magazine article, other: \_\_\_\_\_

- Briefly tell us about it (2 or 3 sentences). What's it about? What happened?

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- How did you like the book? (circle one)
  - a. Great! (I loved it)
  - b. Good (I liked it)
  - c. OK (I didn't mind reading it)
  - d. Boring/Stupid (I wish I hadn't read it)

- Why or why not?

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- This book was: a) too easy for me b) just right c) too difficult
- Any other comments? \_\_\_\_\_

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Appendix B4: Sample of Student's Book Record

Book Reading Record for Extensive Reading (No. 30)

Student's Name Uthaiwan Chuwang No. 30 Section ป.4/90-B

Date	Book No.	Title	Head words	Σ Pages	Σ Words	Time Spent	Difficulty *	Interest **	Reason You Chose
12/11/08		Hotel Casanova	300	29	300	1 hours 30 minutes	2	4	เรื่องทางตลกขบขัน
19/11/08		Love or Money?	400	40	300	2 hours	2	5	เรื่องตลกขบขัน
05/11/08		Goodbye Mr. Hollywood	400	40	300	1 hours 30 minutes	2	4	เรื่องตลกขบขัน
8/12/08		Alice's adventures in wonderland	700	41	600	2 hours	2	5	เรื่องตลกขบขัน
17/12/08		Love story	1000	55	1200	2 hours 30 minutes	3	4	เรื่องตลกขบขัน
14/01/09		One-way ticket	400	38	300	2 hours	2	4	เรื่องตลกขบขัน
24/01/09		Under the Greenwood tree	300	36	300	1 hours 30 minutes	2	5	เรื่องตลกขบขัน
26/01/09		The lottery Winner	400	40	300	2 hours	2	5	เรื่องตลกขบขัน
4/02/09		The Storm	700	18	600	2 hours 30 minutes	2	5	เรื่องตลกขบขัน
11/02/09		The coldest place on Earth	300	39	300	2 hours	2	4	เรื่องตลกขบขัน
3/12/08		Bad Love	300	32	300	1 hours 30 minutes	2	5	เรื่องตลกขบขัน
14									
15									
16									
17									
18									
19									
20									

\* Criteria of Difficulty: 5 = very difficult, 4 = difficult, 3 = a little difficult, 2 = a little easy, 1 = very easy

\*\* Criteria of Interest: 5 = very interesting, 4 = interesting, 3 = a little interesting, 2 = not very interesting, 1 = not at all interesting

Appendix B5: Sample of Student's Record of Out-of-Class Reading

Record of out-of-class reading, kept by students for a 2-week period

Student's name <u>Uthaiwan Churong</u> No <u>30</u> Section <u>11.4/50-B</u>						
Date	Start time	End time	Total reading time (in minute)	What did you read?	Homework reading (√)	Pleasure reading (√)
1/10/08	5:30	5:44	14 minutes	<i>Life on the other side</i> , pp. 80-93 <i>Animal Farm</i>	√	
	17:40	18:00	20 minutes			√
15/11/08	11:00	12:00	1 hours	<i>Hotel Casanova</i>		√
	13:00	13:30	30 minutes			
22/11/08	10:30	11:30	1 hours	<i>Love or Money?</i>		√
	12:00	13:00	1 hours			
28/11/08	13:00	14:30	1 hours 30 minutes	<i>Goodbye Mr Hollywood</i>		√
10/12/08	13:00	15:00	2 hours	<i>Alice's adventures in wonderland</i>		√
13/12/08	12:30	15:00	2 hours 30 minutes		<i>Love story</i>	
16/01/09	15:30	17:30	2 hours	<i>One-Way ticket</i>		√
23/01/09	13:00	14:30	1 hours 30 minutes	<i>Under the Greenwood Tree</i>		√
30/01/09	13:00	15:00	2 hours	<i>The Lottery Winner</i>		√
06/02/09	12:00	14:30	2 hours 30 minutes	<i>The Storm</i>		√
13/02/09	13:00	15:00	2 hours	<i>The coldest place on Earth</i>		√
05/12/08	14:30	15:00	1 hours 30 minutes	<i>Bad Love</i>		√

*Handwritten blue and red initials or marks.*



## Appendix B6: Sample of Student's Checkout Sheet

3

### Extensive Reading: Checkout Sheet

Name <u>Uthaiwan Chuyong</u> Number <u>30</u> Section <u>M.4/50-B</u>
---

No.	Title	Book number	Date borrowed	Date returned
1	Hotel Casanova	Level 1	12/11/08	19/11/08
2	Love or Money?	Level 1	19/11/08	26/11/08
3	Goodbye Mr. Hollywood	Level 1	26/11/08	8/12/08
4	Alice's adventures in wonderland	Level 2	8/12/08	17/12/08
5	Love story	Level 3	17/12/08	14/01/09
6	One-Way ticket	Level 1	14/01/09	21/01/09
7	Under the Greenwood Tree	Level 2	21/01/09	28/01/09
8	The lottery Winner	Level 1	28/01/09	4/02/09
9	The Storm	Level 2	4/02/09	11/02/09
10	The coldest place on Earth	Level 1	11/02/09	18/02/09
11	Bad Love	Level 1	11/02/09	18/02/09
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				

Very Good!

↙

from W.5

## Appendix B7: Sample of Lesson Plan in ER Project

<b>Week 1</b>	<b>LESSON PLAN</b>	<b>Unit 14 (English 2)</b>
<b>Date:</b> Tue 4 Nov 08		<b>Time 3 hours</b>

### Unit 14: So that's what it means!

#### Objectives

1. To introduce the research project
2. To tell students about what to learn, how to learn, and why to learn in this course, that is to follow the same syllabus of English 2 and that students will be supplemented with extensive reading
3. To teach Unit 14 in the course book
4. To introduce extensive reading and ask students to give consent by signing the form

#### Content

1. *Understand modals and adverbs to talk about meaning*
  - 1.1 Explain modals: may, might, could, must
  - 1.2 Explain adverbs: maybe, perhaps, possibly, probably, definitely
2. *Understand how to express permission, obligation, and prohibition*
  - 2.1 State permission: can, is allowed to
  - 2.2 Point out obligation: have to, have got to
  - 2.3 Tell prohibition: can't, isn't allowed to
3. Ask individual students to choose one grader reader to read on their own and write a summary of the book

#### Methods of teaching and activities

1. Lecture
2. Discussion
3. Practice
4. Explaining
5. Pair working
6. Group working
7. Individual working

#### Teaching materials

1. Student's course book—Interchange 3<sup>rd</sup> edition (Richards et al 2003)
2. Supplementary sheets
3. Audio-visual: Transparencies & CD player

## **Assignment**

Do the exercises in the textbook.

## **Evaluation**

1. Participation
2. Observation
3. Checking exercises

## **Procedures**

1. On the first day of the class, teacher introduces herself and the research project and asks students to introduce themselves. Students gave consent and took the pretest of reading comprehension.
2. Teacher presents questions about reading (see Box 1.1 below), using OHP (overhead projector), introduces and explains each question. Teacher instructs students to share their answers to the questions in their groups.
3. Teacher follows the group sharing with a whole-class discussion of the questions.
4. Teacher asks students to select the reader, each for one book to read for one week, giving suggestions on the levels of graded readers along with titles and blurbs.
5. Students fill in a book report form (write down the name of the book they borrow.)
6. Teacher teaches Unit 14.

## **ER session procedures: An orientation to an extensive reading program**

- This orientation process will be continued in various ways at appropriate intervals throughout the course until the students have truly made the principles and goal of ER their own.
- An orientation tells the students what they will do and why they will be doing it. Topics include the goals and procedures of the program and the principles that underline them, as well as an introduction to the reading materials and their availability. Below are the topics of the orientation in more detail.
  - The goals of the program

One of the primary goals of ER is for students to become fluent readers through their sight vocabulary and enjoy reading in the foreign language. ER program will provide practice in:

    - making meaning directly from a text without translation
    - knowing the purposes of which one is reading, because different purposes require different ways of reading
    - “going for meaning”, that is, remaining focused on the overall meaning of what is being read without getting sidetracked by unfamiliar language or ideas
    - guessing at or ignoring unfamiliar language or difficult ideas
    - reading at an appropriate speed for one’s purpose



- being satisfied, when appropriate, with less than total comprehension students will be told that they will practice all these things, and as a result, will grow to have increased confidence and ability to read in the foreign language
- The procedures of the program
 

ER requires students to read a large quantity of easy texts. The principle behind this is that “you learn to read by reading.” The macho maxim of foreign language reading instruction – *no reading pain, no reading gain*. The motto of ER is ‘*reading gain without reading pain.*’
- *Self-selection of materials* What, when, where and how to read.
- Students choose the materials that can be read with ease and comfort. They are told that the teacher will be helping them in the beginning to select material that matches their reading abilities but that in the end they are the ones who determine what they read. Students need a quick strategy to help them determine if a book is within their comfort zone for ER. One way is to open the book at random and read a page, counting the words that are not known. There should be no more than five unknown words on the sample page. (121-122)
- *No dictionaries* Teacher reminds students that it is no fun to be looking up words constantly while reading, and, besides, it breaks the reader’s concentration. In addition, constantly dictionary use means that students read less. A study found that a group of students using dictionaries took almost twice as long to read a short story as did another group that did not use dictionaries (Luppescu and Day 1993).
- *Techniques of fluent reading*
- Reading requirements
- Reading materials
- Teacher orients students to an extensive reading approach

**BOX 1.1 Questions about Reading**

- How much do you like reading in your first language?
- How much do you like reading in English?
- What difficulties do you have with reading in English?
- How much time do you spend each week reading for pleasure?
- What makes a book a good book?
- What kinds of books do you enjoy?
- Tell about a good book you have read recently.
- What is the best book you have read in English?

(Cambridge University Press 2004)

## Appendix C: Pilot Research Instruments C1: Pilot Reading Comprehension Tests

Reading Comprehension Test Name.....Major.....

### Reading Comprehension: Passage 1

**Directions:** You will read an English text and then be asked to respond to them in two ways in *Thai* as best as you can. There will be words, phrases, sentences, or paragraphs which you will not understand, do not let that discourage you. Please focus on what you recognize and understand.

#### Anger

“Anger is just covered over,” Aunt Rosie had said. “If you want to solve the problem, stay in touch with the hurt. Don’t let the anger take over, or you’ll never get anything worked out. The ego uses anger to build a fence around itself so it won’t get hurt again.”

I thought about her advice. Les was late again. He’d said he’d be home by six. It was nearly 8:30.

I heard the click of the door. “Stay in touch with the hurt,” I told myself.

Les stood hesitantly, as if I were going to throw something.

“Sorry I’m late,” he said softly. He had tired lines around his eyes and mouth. His shoulders drooped.

“I felt really hurt that you weren’t here when you said you would be. I fixed a really nice dinner, but it’s all cold now,” I said.

“I’m sorry. I couldn’t even call. The boss insisted I go out to that new construction site and settle the change of plans with the foreman. I couldn’t even get to a phone to call you ... thanks for not being mad.”

Aunt Rosie was right, I thought. If I had hit him full tilt with anger, we’d have just had a big fight. I smiled at him.

“Well, it can’t be undone now, I guess,” I told him. I wasn’t feeling angry anymore.

Les put down his briefcase and drew me into his arms. “Tell you what,” he said, “How ’bout Friday night, we’ll go out to eat – just to make up for tonight’s ruined dinner.”

“OK,” I agreed. Then to myself I said, “Thanks, Aunt Rosie, you were right. If you want to solve the problem, don’t let anger take over. Stay in touch with the hurt.”

(292 words)



**Appendix C: Pilot Research Instruments C1: Pilot Reading Comprehension Tests**

Reading Comprehension Test Name.....Major.....

2. Open-ended questions of Passage 1: Anger Please answer the questions in *Thai*.

(main idea) 1. What is the main idea of this story?

.....  
.....

(detail) 2. What was Aunt Rosie's advice?

.....  
.....

(cause and effect/ inference) 3. Why did the woman think about Aunt Rosie's advice?

.....

(sequence) 4. What did Les say after the woman told him that she had fixed a nice dinner?

.....  
.....

5. What was the last thing Les did in this story?

.....

(vocabulary) 6. What does the word "fixed" mean?

.....

(cause and effect/ detail) 7. Why did Les come home late?

.....  
.....

8. How did the woman solve her problem?

.....  
.....

(inference/ detail) 9. Did the woman follow Aunt Rosie's advice? (yes/no)

.....

What in the story caused you to answer that?

.....  
.....

10. Who are the man and the woman?

.....

## Appendix C: Pilot Research Instruments C1: Pilot Reading Comprehension Tests

Reading Comprehension Test Name.....Major.....

### Passage 2

**Directions:** You will read an English text and then be asked to respond to them in two ways in *Thai* as best as you can. There will be words, phrases, sentences, or paragraphs which you will not understand, do not let that discourage you. Please focus on what you recognize and understand.

#### The Choking Dog

"Come on, come on, move it, idiot!"

Joanne beat impatiently on the steering wheel of her Mercedes sports car. How stupid to get caught up in the rush hour! She had planned to leave work early this afternoon, at three o'clock, to give herself a chance to relax and have a bath before going out to a meeting of her local tennis club. But just at ten to three a client had arrived, and it was two hours before she had finished dealing with the man. When she came out of her office, all the other staff in the Highlight Advertising Agency had already left. Now she was stuck in a traffic jam in central Birmingham at 5:30, and at 6:30 she was expected to be chairing a meeting of the tennis club. There would be no time for any hot bath.

Ahead of her, the traffic was moving at last, and she swung quickly out into the centre lane to turn right, and raced the last half-mile through the quiet suburban streets to her house. Pulling up on the driveway, she leapt out of the car and ran for the house. As she opened the door, she nearly tripped over Sheba, who was standing behind it.

"Hey, Sheba, hello," she said, bending down to stroke the large Alsatian dog's head, "I've got no time for you now, but I'll take you out as soon as I get back from the tennis club."

It was then that she noticed something worrying about the dog. Sheba seemed to be coughing or choking, her stomach pumping repeatedly as if she was trying to vomit something up. She was obviously in real discomfort and could hardly breathe; her sad eyes gazed up at Joanne helplessly.

"Oh damn, this is all I need now," said Joanne to herself, dropping her briefcase and bending down to take a closer look, "a sick dog, today of all days!" On closer examination, Sheba did look very sick, and Joanne realized she would have to take her down to the vet immediately. Luckily, the vet's surgery was only a few streets away, and Joanne quickly loaded the dog, still coughing and choking, into her car for the short drive.

When she got there, the surgery was just about to close for the day. Luckily, Dr. Stern had not left yet, and when he saw the state of Sheba, he brought her quickly into his office.

"It looks like something is stuck in her throat," said Dr. Stern. "It shouldn't take me too long to get it out."

"Listen, doctor, I'm really in a rush to get to a meeting -- can I leave her with you, and go and get changed? I'll be back in ten minutes to pick her up, then I'll take her on to the meeting with me. Is that OK?"

"Sure," said the doctor. "You get going. I'll see you in ten minutes."

Joanne jumped back into her car again, and made the quick trip round to her house in a couple of minutes. As she was once more entering the hallway, the phone on the table by the door began to ring. She picked it up, annoyed by this additional interruption to her plans.

"This is Dr. Stern," said an anxious voice. "Is that you, Joanne?"

"Of course it's me," said Joanne, surprised at the sound of his voice, "no-one else lives here."

## Appendix C: Pilot Research Instruments C1: Pilot Reading Comprehension Tests

Reading Comprehension Test      Name.....Major.....

"I want you to get right out of that house immediately," said the doctor's voice. "Right now. I'm coming round right away, and the police will be there any time now. Wait outside for us." The phone went dead. Joanne stared at it. She was confused, but she was also a little frightened by the obvious fear in the voice of the doctor. She replaced the receiver, then quickly backed out of the door and ran into the street.

At that moment, a police car with its lights flashing swung round the corner and screeched to a stop outside the house. Two policemen got out. After briefly checking that she was the owner of the house, they ran into the house through the still open door, without explaining anything. Joanne was by now completely confused and very frightened. Then the doctor arrived.

"Where's Sheba? Is she OK?" shouted Joanne, running over to his car.

"She's fine, Joanne. I extracted the thing which was choking her, and she's OK now."

"Well what's this all about? Why are the police in my house?"

Just then, the two policemen reappeared from the house, half-carrying a white-faced figure, a man in a dark grey sweater and jeans, who, it seemed, could hardly walk. There was blood all over him.

"My God," said Joanne, "how did he get in there? And how did you know he was there?"

"I think he must be a burglar," said the doctor. "I knew he was there because when I finally removed what was stuck in Sheba's throat, it turned out to be three human fingers. I don't think he's a very happy burglar."

(845 words)



**Appendix C: Pilot Research Instruments C1: Pilot Reading Comprehension Tests**

Reading Comprehension Test Name.....Major.....

2. Open-ended questions of Passage 2: A Choking Dog Please answer the questions in *Thai*.

(main idea) 1. What is the main idea of this story?

.....  
.....

(detail) 2. What brand and type was Joanne’s car?

.....

(cause and effect/ detail) 3. Why couldn’t Joanne leave work early?

.....

4. Why did Joanne leave Sheba with the doctor?

.....

5. What caused Sheba to choke?

.....

.....

6. What happened to the burglar?

.....

(sequence) 7. What did Joanne do after she had talked to the doctor on the phone?

.....

.....

(inference) 8. Did Joanne think that Sheba wanted to go out? (yes/no)

.....

What did the story say that make you believe that?

.....  
.....

9. Why did the policemen get into the house?

.....

(vocabulary) 10. What does the word ‘choking’ mean?

.....



## Appendix C: Pilot Research Instruments C1: Pilot Reading Comprehension Tests

Reading Comprehension Test Name.....Major.....

**Directions:** You will read an English text and then be asked to respond the open-ended questions in *Thai* as quickly and as best as you can. There will be words, phrases, sentences, or paragraphs which you will not understand, do not let that discourage you. Please focus on what you recognize and understand.

### Passage 3

#### Lucy and the Chickens

- 1 Lucy's family had lots of animals. They had cows, horses, and pigs. They also had a dog, a cat, and a bird. Lucy's favorite animals were the chickens. She enjoyed collecting eggs from the henhouse. But she wasn't allowed to gather the eggs by herself.
- 2 "The hook that keeps the henhouse door closed is too high," Dad explained. "You're not tall enough yet to reach the hook and Then fasten it again. If you don't shut the door tightly, the chickens could get out. They might become supper for a coyote or some other wild animal." Lucy's eyes widened. She promised never to open the henhouse door by herself.
- 3 The next morning Dad went to town to get a part to fix the tractor. Mom was talking on the phone to Grandma. All by herself Lucy swept the front porch. She put water in the dog's bowl. By noon the bright sun was shining overhead. Lucy felt thirst after doing her chores outside.
- 4 Lucy went inside the house. She heard her mother still talking to grandma. Lucy got a cool drink of water. Then she went back outside and admired the flower garden. "I'd better water the flowers," Lucy said to herself. "They're probably thirsty."
- 5 After watering the flowers, Lucy glanced toward the henhouse. "I should give the chickens some water. They're probably thirsty, too."
- 6 Lucy filled a big bucket with water. She could barely lift it. She tried dragging the bucket, but the water sloshed out. So she went to get her wagon. Hauling the water in the wagon was easier than carrying it by hand.
- 7 At last Lucy stood at the henhouse door. The hook was high. Even when she stretched on her tiptoes, she couldn't reach it. She looked around and saw a stick on the ground. Using the stick, she pushed and poked at the hook. Soon the hook was free. Slowly the door swung open. Twenty chickens stared at her.
- 8 Lucy considered what her father had said. She remembered her father's warning that a coyote might harm the chickens. However, she did not want the chickens to be thirsty, either.

## Appendix C: Pilot Research Instruments C1: Pilot Reading Comprehension Tests

Reading Comprehension Test Name.....Major.....

- 9 “Look what I brought you,” she said. She went to get the bucket of water. Carefully she lifted the heavy bucket and set it on the ground. When she turned back around, the chickens were rushing through the open door.
- 10 “No!” Lucy cried, waving her arms. “Get back in there! Shoo!”
- 11 But it was too late. Lucy started chasing the chickens around the yards. They ran this way and that. They scurried here and there. They flew and flapped. They fluttered and hopped. The more Lucy chased them, the more they scattered. They went behind trees and haystacks. They went under the tractor and wagon. The chickens didn’t seem to understand that Lucy was trying to save them.
- 12 By the time Dad got home, Lucy had given up. She was sitting in front of the henhouse crying in despair. Dad noticed the open door. He saw the bucket full of water. It didn’t take him long to guess what was wrong.
- 13 Let’s get those chickens back in the henhouse,” he said firmly. He went to get some chicken feed in a bucket. “Here, chick, chick, chick,” he called. He spread the feed on the ground near the henhouse. Soon all the chickens came to eat the feed. One by one, Lucy and Dad caught the chickens. When all the chickens were back in the henhouse, Dad hooked the door. Now the chickens were safe from coyotes.
- 14 Lucy and Dad walked back to the house. “Your intention was good, and I know that you meant well,” Dad said. “Giving the chickens some water was a fine thought. But it would have been better not to open the door by yourself.” He stopped and looked at Lucy. “It’s a lot easier to keep chickens in than to catch them once they get out. Do you know what I mean?”
- 15 Lucy nodded. She knew exactly what he meant. She also knew that this was a lesson she would never forget.

(686 words)



**Appendix C: Pilot Research Instruments C1: Pilot Reading Comprehension Tests**

*Reading Comprehension Test*      *Name.....Major.....*

Open-ended questions of Passage 3: Please answer the questions in *Thai*.

(main idea)      1. What is the main idea of this story?

.....  
.....  
.....

(detail)      2. Where does Lucy live?

.....  
.....

3. Where is Lucy's mother?

.....  
.....

4. How does Dad help Lucy catch the chickens?

.....  
.....

(cause and effect/ detail)      5. Why are the chickens kept inside the henhouse?

.....

(sequence)      6. What happens after Lucy opens the door to the henhouse?

.....  
.....

(vocabulary)      7. What does the word "coyote" mean?

.....

(cause and effect/ detail)      8. Why does Dad go to town?

.....  
.....

9. Why does Lucy open the door to the henhouse?

.....  
.....

(inference/detail)      10. Why isn't Lucy allowed to gather eggs from the henhouse by herself?

.....  
.....

## Appendix C2: Pilot Attitude Questionnaire (English Version): ATTITUDE SURVEY

Thank you for your participation in the extensive reading project. In order for me to evaluate the success of the program, your feedback here is needed. Please response to the following questions honestly. Be as complete and as specific as possible. Please continue on back if necessary.

Once again, your effort is greatly appreciated. ☺ Kamonnat Tamrackitkun ☺

Name ..... Faculty ..... Major .....

Part 1: Sex (*circle one*):    male            female

How long have you been studying English? 0-3   4-6    7-9    10-12   13-15   16-18

Part 2: 2.1 Please ○ circle the appropriate response to the following statements about **reading and foreign language learning**. Rate the response according to the level of 1, 2, 3, and 4. 1 is the least strong while 4 is the strongest.

1 = *Strongly Disagree*    2 = *Disagree*        3 = *Undecided*    4 = *Agree*        5 = *Strongly Agree*  
DN = *I don't know*        DU = *I don't understand the question*

1. Learning to read English is an important skill for developing proficiency in a foreign language.

1      2      3      4      5      DN      DU

2. Learning to read English is less important than other skills (i.e. speaking, writing).

1      2      3      4      5      DN      DU

3. Practice reading English will help me to understand unfamiliar words in print.

1      2      3      4      5      DN      DU

4. Practice reading English will help me to understand spoken English.

1      2      3      4      5      DN      DU

5. Practice reading English will help me to participate in English conversations.

1      2      3      4      5      DN      DU

6. Practice reading English will help me to write in English.

1      2      3      4      5      DN      DU

7. I am interested in being able to read English texts for study in other fields (e.g. History, Philosophy).

1      2      3      4      5      DN      DU

8. I am interested in being able to read English texts of my own choosing.

1      2      3      4      5      DN      DU

9. I read English differently from how I read my native language.

1      2      3      4      5      DN      DU

10. I read an unfamiliar English text word-for-word.

1      2      3      4      5      DN      DU

11. I enjoyed the reading assignment in English class this semester.

1      2      3      4      5      DN      DU

12. I read texts written in English during my free time.  
1      2      3      4      5      DN      DU

13. If I come across a text (e.g. magazine, newspaper) written for native speakers of English, I make an effort to try to read it.  
1      2      3      4      5      DN      DU

14. I feel confident about my ability to read a text written for native speakers of English (e.g. magazines, newspapers, books, online texts, etc.).  
1      2      3      4      5      DN      DU

15. I am now more inclined to continue studying English than I was at the start of the semester.  
1      2      3      4      5      DN      DU

## **2.2 Questions for students who spent their time reading graded readers.**

16. I would like the additional time spend on reading to continue in future semester.  
1      2      3      4      5      DN      DU

17. I benefited from in-class activities related to extensive reading..  
1      2      3      4      5      DN      DU

18. I would have preferred to have done more reading outside of class.  
1      2      3      4      5      DN      DU

19. I would have preferred to have read several shorter texts instead of one longer one.  
1      2      3      4      5      DN      DU

20. I benefited from the partner and group work when reading in class.  
1      2      3      4      5      DN      DU

21. My ability to understand the reading texts did not increase during the semester.  
1      2      3      4      5      DN      DU

## **The experience I received in reading graded readers**

22. helped me improve reading comprehension.  
1      2      3      4      5      DN      DU

23. helped me read popular English magazines and newspapers for general information and details.  
1      2      3      4      5      DN      DU

24. helped me read popular English magazines and newspapers for enjoyment.  
1      2      3      4      5      DN      DU

25. helped me read an English popular novel (romance novel, detective story, war story) for general information and details.  
1      2      3      4      5      DN      DU

26. helped me read an English popular novel (romance novel, detective story, war story) for enjoyment.  
1      2      3      4      5      DN      DU

27. helped me read an English article or book in my main areas of interests for general information and details.  
1      2      3      4      5      DN      DU

28. made me want to read more materials of a similar type.  
1 2 3 4 5 DN DU
29. helped me learn how to scan reading selections.  
1 2 3 4 5 DN DU
30. helped me find subordinate ideas in the reading.  
1 2 3 4 5 DN DU
31. enabled me to find main ideas in the reading.  
1 2 3 4 5 DN DU
32. helped me bring out more prior knowledge into reading comprehension.  
1 2 3 4 5 DN DU
33. helped me little to learn how to read between the lines.  
1 2 3 4 5 DN DU
34. contained reasonable blend of explanation and practice.  
1 2 3 4 5 DN DU
35. helped me get more than I expected from extensive reading.  
1 2 3 4 5 DN DU
36. was an interesting experience.  
1 2 3 4 5 DN DU
37. made me want to take this experience again.  
1 2 3 4 5 DN DU
38. was effective.  
1 2 3 4 5 DN DU
39. helped me use what I learned in my future study.  
1 2 3 4 5 DN DU
40. made me feel that the instructor responses were very important.  
1 2 3 4 5 DN DU
41. enabled me to apply prior knowledge while handling the new knowledge.  
1 2 3 4 5 DN DU
42. made me depend on more reading materials.  
1 2 3 4 5 DN DU
43. made me more dependent on dictionary.  
1 2 3 4 5 DN DU

### 2.3 The reading assessment methods used in the study

44. were relevant with the reading materials used in the eight week study.  
1 2 3 4 5 DN DU
45. did not reflect the general evaluation standards in my mind.  
1 2 3 4 5 DN DU

46. were helpful in guiding me to review what I have learned in the study.  
1      2      3      4      5      DN      DU

47. helped me find problems I still have in the area of reading.  
1      2      3      4      5      DN      DU

**2.4 Now please answer the following questions about your reading habits.**

48. At what age did you first begin reading for pleasure in Thai?  
a. 5-10 years  
b. 11-15 years  
c. 16-20 years  
d. 20 above

49. At what age did you first begin reading for pleasure in English?  
a. 5-10 years  
b. 11-15 years  
c. 16-20 years  
d. 20 above

50. What are your favorite kinds of books and magazine articles to read *for pleasure*, i.e. reading not assigned for coursework? Rank from the top (1) to the least (9).

- \_\_\_\_\_ 51.1 biography
- \_\_\_\_\_ 51.2 historical fiction
- \_\_\_\_\_ 51.3 romances
- \_\_\_\_\_ 51.4 westerns
- \_\_\_\_\_ 51.5 mysteries
- \_\_\_\_\_ 51.6 comic books
- \_\_\_\_\_ 51.7 science fiction / horror stories
- \_\_\_\_\_ 51.8 non-fiction features
- \_\_\_\_\_ 51.9 other (please specify):.....

51. About how many books of any sort (not including magazines/newspapers) do you read in Thai each month *for pleasure* when you are not in school?  
a. 0  
b. 1-2  
c. 3-4  
d. 5 or more

52. About how many books of any sort (not including magazines/newspapers) do you read in English each month *for pleasure* when you are not in school?  
a. 0  
b. 1-2  
c. 3-4  
d. 5 or more

53. About how many hours per week do you read in Thai during the average semester? Include your reading of textbooks, etc. for coursework.  
a. 1-5 hours  
b. 6-10 hours  
c. 11-15 hours  
d. 16 hour or more



54. About how many hours per week do you read in English during the average semester? Include your reading of textbooks, etc. for coursework.
- 1-5 hours
  - 6-10 hours
  - 11-15 hours
  - 16 hour or more
55. How often do you discuss with others the books you read in Thai for pleasure?
- never (0%)
  - rarely (1-20%)
  - seldom (21-40%)
  - sometimes (41-60%)
  - often (61-80%)
  - always (81-100%)
56. How often do you discuss with others the books you read in English for pleasure?
- never (0%)
  - rarely (1-20%)
  - seldom (21-40%)
  - sometimes (41-60%)
  - often (61-80%)
  - always (81-100%)
57. About how many hours do you watch television each week?
- 1-5 hours
  - 6-10 hours
  - 11-15 hours
  - 16 hours or more
58. What are your favorite kinds of TV shows? Rank from the top (1) to the least (9).
- \_\_\_\_\_ 58.1 news and/or news magazines
  - \_\_\_\_\_ 58.2 situational comedies
  - \_\_\_\_\_ 58.3 romances and/or soap operas
  - \_\_\_\_\_ 58.4 westerns
  - \_\_\_\_\_ 58.5 mysteries / police shows
  - \_\_\_\_\_ 58.6 cartoons
  - \_\_\_\_\_ 58.7 science fiction / horror shows
  - \_\_\_\_\_ 58.8 documentaries
  - \_\_\_\_\_ 58.9 family dramas
  - \_\_\_\_\_ 58.10 other (please specify): .....
59. About how many hours do you use the Internet each week?
- 1-5 hours
  - 6-10 hours
  - 11-15 hours
  - 16 hours or more
60. What do you use the Internet for? Rank from the top (1) to the least (7).
- \_\_\_\_\_ 60.1 chatting with friends
  - \_\_\_\_\_ 60.2 playing games
  - \_\_\_\_\_ 60.3 listening to music
  - \_\_\_\_\_ 60.4 watching movies
  - \_\_\_\_\_ 60.5 searching for information dues to the teachers' assignments
  - \_\_\_\_\_ 60.6 searching for information and/or studying due to my own interests
  - \_\_\_\_\_ 60.7 other (please specify): .....

♥ Thank you very much for your kind help ♥

### Appendix C3: Pilot Questionnaire (Thai Version)

แบบสำรวจความคิดเห็นของนักศึกษา  
เกี่ยวกับการอ่านหนังสืออ่านเล่นนอก เวลา (Extensive Reading)

#### คำชี้แจง

1. แบบสอบถามชุดนี้เป็นส่วนหนึ่งของโครงการวิจัยเรื่อง “ผลของการใช้ทฤษฎีการอ่านมากในการสอนอ่านภาษาอังกฤษเพื่อความเข้าใจ สำหรับนักศึกษามหาวิทยาลัยเทคโนโลยีราชมงคลธัญบุรี” เพื่อนำผลการวิจัยไปใช้ในการพัฒนาการเรียนการสอนภาษาอังกฤษ ตามหลักสูตรมหาวิทยาลัยเทคโนโลยีราชมงคลธัญบุรี
2. แบบสอบถามวัดทัศนคตินี้ เป็นคำถามเกี่ยวกับความรู้สึกหรือสิ่งที่นักศึกษปฏิบัติเกี่ยวกับการเรียนภาษาอังกฤษของนักศึกษา มีทั้งหมด 60 ข้อ
3. การตอบแบบสอบถามแต่ละข้อ จะไม่มีคำตอบที่ถูกหรือผิด และไม่มีผลต่อคะแนนการเรียนของนักศึกษาแต่ประการใด นักศึกษามีอิสระในการตอบอย่างเต็มที่ และการวิจัยครั้งนี้จะวิเคราะห์ข้อมูลเป็นผลรวม ผู้วิจัยขอรับรองว่าข้อมูลที่นักศึกษาตอบทั้งหมดถือเป็นความลับ
4. การตอบแบบสอบถามจะมีประโยชน์มากที่สุด ก็ต่อเมื่อนักศึกษาตอบตรงตามความเป็นจริงมากที่สุด
5. แบบสอบถามประกอบด้วย 2 ตอน คือ ตอนที่ 1 ข้อมูลส่วนตัว  
ตอนที่ 2 ความคิดเห็นเกี่ยวกับการอ่านภาษาอังกฤษ
6. เมื่อท่านตอบแบบสอบถามเสร็จสมบูรณ์แล้ว กรุณาส่งคืนที่ผู้วิจัย  
ผู้วิจัยขอขอบคุณอย่างมากที่ได้รับความร่วมมือด้วยดีจากท่าน

(นางสาว กมลนันทน์ ธรรมรักจิตกุล)

ผู้วิจัย

(ทฤษฎีการอ่านมาก (Extensive Reading) หมายถึง การอ่านหนังสือนิทาน นิยาย หรือเรื่องอ่านเล่น ภาษาอังกฤษจำนวนมาก โดยไม่ใช้พจนานุกรม (Dictionary) ในขณะที่อ่าน เป็นการอ่านตามอรรถาธิบาย ผู้อ่านสามารถเลือกเรื่องที่อ่าน สถานที่อ่านและเวลาในการอ่านได้ตามความพอใจ โดยมีจุดประสงค์หลักเพื่อเข้าใจเรื่องที่อ่านโดยรวม)

ตอนที่ 1 ข้อมูลส่วนตัวของผู้ตอบแบบสอบถาม

โปรดทำเครื่องหมาย ✓ ลงใน  หน้าข้อความตามความเป็นจริง ()

1. เพศ

ชาย  หญิง

2. ประสบการณ์ในการเรียนวิชาภาษาอังกฤษ

0-3 ปี

4-6 ปี

7-9 ปี

10-12 ปี

13-15 ปี

16-18 ปี

3. นักศึกษาเคยเรียนอ่านภาษาอังกฤษโดยใช้หนังสืออ่านนอกเวลาหรือไม่

เคย  ไม่เคย

4. ถ้าตอบข้อ 3 ว่าเคยเรียนอ่านโดยใช้หนังสืออ่านเล่นนอกเวลา นักศึกษาเคยเรียนมาแล้วกี่ปี

น้อยกว่า 1 ปี  2 ปี  3 ปี  4 ปี  5 ปีขึ้นไป

เฉพาะเจ้าหน้าที่

1-3 ID

## ตอนที่ 2 ความคิดเห็นเกี่ยวกับการอ่านภาษาอังกฤษเพื่อความเข้าใจ โดยใช้หนังสืออ่านเล่น

### นอกเวลา

โปรดทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความคิดเห็นของท่านมากที่สุด

1 = “ไม่เห็นด้วยมากที่สุด” 2 = “ไม่เห็นด้วยมาก”

3 = “เห็นด้วยปานกลาง” 4 = “เห็นด้วยน้อย” 5 = “เห็นด้วยน้อยที่สุด”

DN = “ไม่ทราบ”

DU = “ไม่เข้าใจคำถาม”

2.1 โปรดพิจารณาตามความเป็นจริงว่าในการอ่านภาษาอังกฤษเพื่อความเข้าใจ นักศึกษามีความคิดเห็นต่อสิ่งต่อไปนี้- มากน้อยเพียงใด

ข้อความ	ระดับความคิดเห็น						
	ไม่เห็น ด้วย มาก ที่สุด (1)	ไม่ เห็น ด้วย มาก (2)	เห็น ด้วย ปาน กลาง (3)	เห็น ด้วย น้อย (4)	เห็น ด้วย น้อย ที่สุด (5)	ไม่ทราบ (DN)	ไม่เข้าใจคำถาม (DU)
1. การเรียนอ่านภาษาอังกฤษเป็นทักษะที่สำคัญในการพัฒนาความสามารถทางภาษาต่างประเทศ							
2. การเรียนอ่านภาษาอังกฤษเป็นทักษะที่สำคัญน้อยกว่าทักษะอื่น ๆ (เช่น การพูด การเขียน)							
3. การเรียนอ่านภาษาอังกฤษเป็นทักษะที่สำคัญในการพัฒนาความสามารถทางภาษาต่างประเทศ							
4. การเรียนอ่านภาษาอังกฤษเป็นทักษะที่สำคัญในการพัฒนาความสามารถทางภาษาต่างประเทศ							
5. การฝึกอ่านภาษาอังกฤษจะช่วยให้ข้าพเจ้ามีส่วนร่วมในการสนทนาภาษาอังกฤษ							
6. การฝึกอ่านภาษาอังกฤษจะช่วยให้ข้าพเจ้าในการเขียนภาษาอังกฤษ							
7. ข้าพเจ้าสนใจที่จะมีความสามารถใน							

8. ข้าพเจ้าสนใจที่จะมีความสามารถในการอ่านบทอ่านภาษาอังกฤษที่ข้าพเจ้าเลือกได้เอง							
9. วิธีที่ข้าพเจ้าอ่านภาษาอังกฤษแตกต่างวิธีที่ข้าพเจ้าอ่านภาษาไทย							
10. ข้าพเจ้าอ่านคำศัพท์ภาษาอังกฤษที่ไม่ทราบด้วยวิธีอ่านแบบคำต่อคำ							
11. ข้าพเจ้ารู้สึกสนุกกับการบ้านที่เกี่ยวข้องกับการอ่านในชั้นเรียนภาษาอังกฤษเทอมนี้							
12. ข้าพเจ้าอ่านบทอ่านภาษาอังกฤษในช่วงเวลาว่าง							
13. ถ้าข้าพเจ้าเผชิญพบบทอ่าน (เช่น นิตยสาร หนังสือพิมพ์) ภาษาอังกฤษ ข้าพเจ้าจะพยายามอ่านให้ได้							
14. ข้าพเจ้ารู้สึกมั่นใจในความสามารถของตัวเองที่จะอ่านบทอ่านที่เขียนเป็นภาษาอังกฤษเพื่อให้เจ้าของภาษาอ่าน (เช่น นิตยสาร หนังสือพิมพ์ หนังสือ บทอ่านในอินเทอร์เน็ต เป็นต้น)							
15. ขณะนี้ข้าพเจ้ารู้สึกอยากเรียนภาษาอังกฤษต่อไปอีก มากกว่าตอนที่เริ่มเรียนครั้งแรกในเทอมนี้							
<b>2.2 คำถามสำหรับนักศึกษาที่อ่านหนังสืออ่านเล่นนอกเวลา</b>							
16. ข้าพเจ้าอยากให้มีเวลาในการอ่านที่เพิ่มขึ้นมาเป็นพิเศษนี้ยังคงมีอยู่ต่อไปอีกในเทอมหน้า							
17. ข้าพเจ้าได้รับประโยชน์จากกิจกรรมในห้องเรียนที่เกี่ยวข้องกับการอ่านมาก							
18. ข้าพเจ้าอยากให้ตัวเองได้ฝึกอ่านนอก							

19. ข้าพเจ้าอยากให้ตัวเองได้ฝึกอ่านบทอ่านสั้นๆหลายบทแทนที่จะอ่านเรื่องยาวๆเรื่องเดียว							
20. ข้าพเจ้าได้รับความรู้จากการทำงานเป็นคู่และเป็นกลุ่มเมื่ออ่านในชั้นเรียน							
21. ความสามารถในการอ่านของข้าพเจ้าไม่เพิ่มขึ้นระหว่างที่เรียนในเทอมนี้							
<b>ประสบการณ์ที่ข้าพเจ้าได้รับจากการอ่านหนังสืออ่านเล่นนอกเวลา</b>							
22. ช่วยให้ข้าพเจ้าพัฒนาทักษะการอ่าน							
23. ช่วยข้าพเจ้าในการอ่านนิตยสารและหนังสือพิมพ์ภาษาอังกฤษซึ่งเป็นที่นิยม (popular) เพื่อข้อมูลและรายละเอียดทั่วไป							
24. ช่วยข้าพเจ้าในการอ่านนิตยสารและหนังสือพิมพ์ภาษาอังกฤษซึ่งเป็นที่นิยม (popular) เพื่อความเพลิดเพลิน							
25. ช่วยข้าพเจ้าในการอ่านนิยายภาษาอังกฤษซึ่งเป็นที่นิยม (popular) (นิยายรัก, เรื่องเกี่ยวกับนักสืบ, เรื่องสงคราม) เพื่อข้อมูลและรายละเอียดทั่วไป							
26. ช่วยข้าพเจ้าในการอ่านนิยายภาษาอังกฤษซึ่งเป็นที่นิยม (popular) (นิยายรัก, เรื่องเกี่ยวกับนักสืบ, เรื่องสงคราม) เพื่อความเพลิดเพลิน							
27. ช่วยข้าพเจ้าในการอ่านบทความหรือหนังสือภาษาอังกฤษตามความสนใจหลักของข้าพเจ้าเพื่อข้อมูลและรายละเอียดทั่วไป							
28. ทำให้ข้าพเจ้าอยากอ่านหนังสือชนิดเดียวกันมากขึ้น							
29. ช่วยให้ข้าพเจ้าเรียนรู้วิธีการอ่านเร็ว							

30. ช่วยให้ข้าพเจ้าค้นหาใจความสำคัญ รองในบทอ่านได้							
31. ช่วยให้ข้าพเจ้าค้นหาใจความสำคัญ ในบทอ่านได้							
32. ช่วยให้ข้าพเจ้านำความรู้เดิมมาใช้ในการ อ่านเพื่อความเข้าใจ							
33. ช่วยข้าพเจ้าในการอ่านเพื่อตีความได้ เพียงเล็กน้อย							
34. รวมคำอธิบายและการฝึกเข้าใจ ด้วยกันอย่างดี							
35. ช่วยให้ข้าพเจ้าได้รับความรู้มากกว่าที่ คิดไว้จากการอ่านมาก (Extensive Reading)							
36. เป็นประสบการณ์ที่น่าสนใจ							
37. ทำให้ข้าพเจ้าอยากมีประสบการณ์ เช่นนี้อีก							
38. มีประสิทธิภาพ							
39. ช่วยให้ข้าพเจ้าได้ใช้สิ่งที่เรียนรู้ มาแล้วในการศึกษาในอนาคต							
40. ทำให้ข้าพเจ้ารู้สึกถึงความรับผิดชอบ ของผู้สอนสำคัญมาก							
41. ช่วยให้ข้าพเจ้าประยุกต์ความรู้เดิม ระหว่างที่เรียนรู้ความรู้ใหม่							
42. ทำให้ข้าพเจ้าพึ่งเอกสารในการอ่าน มากขึ้น							
43. ทำให้ข้าพเจ้าพึ่งพจนานุกรม (dictionary) มากขึ้น							
<b>2.3 วิธีวัดการอ่านที่ใช้ในการศึกษาวิจัยครั้งนี้</b>							
44. เกี่ยวข้องกับเอกสารการอ่านที่ใช้ใน การศึกษาสี่สัปดาห์นี้							
45. ไม่ได้สะท้อนมาตรฐานการ ประเมินผลโดยทั่วไปในใจของข้าพเจ้า							
46. ช่วยนำทางให้ข้าพเจ้าทบทวนสิ่งที่							

47. ช่วยให้อ่านหัวข้อที่เกี่ยวกับปัญหาที่ตัวเองมีในเรื่องของการอ่าน							

## 2.4 กรุณาตอบคำถามเกี่ยวกับนิสัยในการอ่านของท่าน

48. ท่านเริ่มอ่านเพื่อความเพลิดเพลินเป็นภาษาไทยเมื่ออายุเท่าไร

- ก 5 – 10 ปี
- ข 11 – 15 ปี
- ค 16 – 20 ปี
- ง 20 ปีขึ้นไป

49. ท่านเริ่มอ่านเพื่อความเพลิดเพลินเป็นภาษาอังกฤษเมื่ออายุเท่าไร

- ก 5 – 10 ปี
- ข 11 – 15 ปี
- ค 16 – 20 ปี
- ง 20 ปีขึ้นไป

50. หนังสือหรือนิตยสารเพื่อความเพลิดเพลิน (เรื่องี่อ่านโดยไม่ได้เป็นการบ้าน) ประเภทใดที่ท่านชอบ? กรุณาจัดอันดับโดยเขียนตัวเลขจากที่ชอบมากที่สุด (1) ไปจนถึงชอบน้อยที่สุด (8)

- \_\_\_\_\_ ก ชีวิตประวัติ
- \_\_\_\_\_ ข นิตยประวัติศาสตร์
- \_\_\_\_\_ ค นิตยรัก
- \_\_\_\_\_ ง นิตยตะวันตก (นิตยฝรั่ง)
- \_\_\_\_\_ จ เรื่องลึกลับ
- \_\_\_\_\_ ฉ หนังสือการ์ตูน
- \_\_\_\_\_ ช นิตยวิทยาศาสตร์ / เรื่องสยองขวัญ
- \_\_\_\_\_ ซ ประเภทที่ไม่ใช่ นิตย
- \_\_\_\_\_ ฌ อื่น ๆ (กรุณาระบุ) : \_\_\_\_\_

51. ท่านอ่านหนังสือที่เป็นภาษาไทยเพื่อความเพลิดเพลินประมาณกี่เล่มในแต่ละเดือน เวลาที่ไม่ได้อยู่ในมหาวิทยาลัย

- ก 0
- ข 1 – 2
- ค 3 – 4
- ง 5 หรือ 5 เล่มขึ้นไป



52. ท่านอ่านหนังสือที่เป็นภาษาอังกฤษเพื่อความเพลิดเพลินประมาณกี่เล่มในแต่ละเดือน เวลาที่ไม่ได้อยู่ในมหาวิทยาลัย
- ก 0
  - ข 1-2
  - ค 3-4
  - ง 5 หรือ 5 เล่มขึ้นไป
53. ท่านอ่านหนังสือที่เป็นภาษาไทยประมาณกี่ชั่วโมงในระหว่างภาคเรียน (รวมทั้งตำราเรียน)
- ก 1-5 ชั่วโมง
  - ข 6-10 ชั่วโมง
  - ค 11-15 ชั่วโมง
  - ง 16 หรือ 16 ชั่วโมงขึ้นไป
54. ท่านอ่านหนังสือที่เป็นภาษาอังกฤษประมาณกี่ชั่วโมงในระหว่างภาคเรียน (รวมทั้งตำราเรียน)
- ก 1-5 ชั่วโมง
  - ข 6-10 ชั่วโมง
  - ค 11-15 ชั่วโมง
  - ง 16 หรือ 16 ชั่วโมงขึ้นไป
55. ท่านได้อภิปรายกับผู้อื่นถึงหนังสือที่ท่านอ่านเพื่อความเพลิดเพลินเป็นภาษาไทยบ่อยเพียงใด
- ก ไม่เคยเลย (0%)
  - ข นานๆ ครั้ง (1-20%)
  - ค นานๆ ครั้ง (21-40%)
  - ง บางครั้ง (41-60%)
  - จ บ่อยๆ (61-80%)
  - ฉ เสมอ (81-100%)
56. ท่านได้อภิปรายกับผู้อื่นถึงหนังสือที่ท่านอ่านเพื่อความเพลิดเพลินเป็นอังกฤษบ่อยเพียงใด
- ก ไม่เคยเลย (0%)
  - ข นานๆ ครั้ง (1-20%)
  - ค นานๆ ครั้ง (21-40%)
  - ง บางครั้ง (41-60%)
  - จ บ่อยๆ (61-80%)
  - ฉ เสมอ (81-100%)

57. ท่านดูโทรทัศน์ประมาณกี่ชั่วโมงในแต่ละสัปดาห์

- ก 1-5 ชั่วโมง
- ข 6-10 ชั่วโมง
- ค 11-15 ชั่วโมง
- ง 16 ชั่วโมง หรือ 16 ชั่วโมง ขึ้นไป

58. รายการโทรทัศน์ประเภทใดที่ท่านชอบ

กรุณาจัดอันดับโดยเขียนตัวเลขจากที่ชอบมากที่สุด (1) ไปจนถึงชอบน้อยที่สุด (8)

- \_\_\_\_\_ ก ข่าว และ/หรือ นิตยสารข่าว
- \_\_\_\_\_ ข รายการตลก
- \_\_\_\_\_ ค ภาพยนตร์รัก และ/หรือ ละคร
- \_\_\_\_\_ ง ภาพยนตร์ตะวันตก (ภาพยนตร์ฝรั่ง)
- \_\_\_\_\_ จ เรื่องลึกลับ / สืบสวนสอบสวน
- \_\_\_\_\_ ฉ การ์ตูน
- \_\_\_\_\_ ช นิยายวิทยาศาสตร์ / เรื่องสยองขวัญ
- \_\_\_\_\_ ซ สารคดี
- \_\_\_\_\_ ฌ เรื่องครอบครัว
- \_\_\_\_\_ ญ อื่น ๆ (โปรดระบุ) : \_\_\_\_\_

59. ท่านใช้อินเทอร์เน็ต (Internet) ประมาณกี่ชั่วโมงในแต่ละสัปดาห์

- ก 1-5 ชั่วโมง
- ข 6-10 ชั่วโมง
- ค 11-15 ชั่วโมง
- ง 16 ชั่วโมง หรือ 16 ชั่วโมง ขึ้นไป

60. ท่านใช้อินเทอร์เน็ตเพื่ออะไรเป็นส่วนใหญ่

กรุณาจัดอันดับโดยเขียนตัวเลขจากที่ใช้มากที่สุด (1) ไปจนถึงใช้น้อยที่สุด (๖)

- \_\_\_\_\_ ก คุยกับเพื่อน
- \_\_\_\_\_ ข เล่นเกมส์
- \_\_\_\_\_ ค ฟังเพลง
- \_\_\_\_\_ ง ดูภาพยนตร์
- \_\_\_\_\_ จ ค้นคว้าหาความรู้ตามที่ได้รับมอบหมายจากอาจารย์
- \_\_\_\_\_ ฉ ค้นคว้าหาความรู้เรื่องที่ตัวเองสนใจ
- \_\_\_\_\_ ซ อื่น ๆ (โปรดระบุ) : \_\_\_\_\_

♥ Thank you very much for your kind help ♥

Appendix C4: Sample of Student's Answer to Pilot Reading Comprehension Test

= 2

Reading Comprehension Test

Name..... Major.....

Questions to Passage 1: Anger

1. Written Recall Please write in *Thai* everything you can remember from "Anger".

การโกรธเป็นสิ่งที่ควบคุมไม่ได้ ยิ่งโกรธยิ่งหนักขึ้น ในวัยเด็กโกรธแล้วโดนตี พอโตก็ทำให้อึด  
พอโตแล้วสามารถควบคุมงานตัวเองได้แต่โกรธแล้วสติจะหายไป และถ้าโกรธแล้วคนอื่น  
มาหาเรื่องก็โกรธ.





**Appendix C4: Sample of Student's Answer to Pilot Reading Comprehension Test**

14:52-15:00

Name.....Major.....

Open-ended questions of Passage 1: A, sad, Sad Story Please answer the questions in *Thai*.

(main idea) 1. What is the main idea of this story? (1)

..... *เรื่องคนจนมาซื้อข้าวในร้าน แล้วซื้อข้าวเพิ่ม* ..... X

(detail) 2. Why did the little man go to the shop?

..... *ซื้อข้าวเพิ่ม* ..... X

(inference) 3. Who is the story-teller?

..... *little man* ..... X

4. Will the bill be paid quite large? (yes/no)

..... *yes* ..... X

What did the story say that help you to know that?

..... *เขาบอกว่าจ่ายเพิ่ม* ..... X

(sequence) 5. What did the little man say to a story-teller after he looked at the clock?

..... *—* ..... X

(cause and effect/ inference) 6. Why does the story-teller pay the man's bill?

..... *—* ..... X

(vocabulary) 7. What does the sentence "He buried his face in his hands." mean?

..... *—* ..... X

8. What does the phrase "the little man's face lit up" mean?

..... *—* ..... X

(cause and effect/detail) 9. What caused the little man to order more lunch?

..... *—* ..... X

(inference) 10. Did the story-teller saw the little man again? (yes/no)

..... *yes* ..... ✓

What did the story say that made you believe that?

..... *เขาพูดว่าจ่ายเพิ่ม* ..... X

2/11

## Appendix D: Reading Assessment

### Appendix D1: Reading Comprehension Test: Texts 1 - 3

**Text 1 Directions:** You will read an English text and then be asked to respond to them in two ways in *Thai*: 1) written recall and 2) translation. There will be words, phrases, sentences, or paragraphs which you will not understand, do not let them discourage you. Please focus on what you recognize and understand.

#### Anger

“Anger is just covered over,” Aunt Rosie had said. “If you want to solve the problem, stay in touch with the hurt. Don’t let the anger take over, or you’ll never get anything worked out. The ego uses anger to build a fence around itself so it won’t get hurt again.”

I thought about her advice. Les was late again. He’d said he’d be home by six. It was nearly 8:30.

I heard the click of the door. “Stay in touch with the hurt,” I told myself.

Les stood hesitantly, as if I were going to throw something.

“Sorry I’m late,” he said softly. He had tired lines around his eyes and mouth. His shoulders drooped.

“I felt really hurt that you weren’t here when you said you would be. I fixed a really nice dinner, but it’s all cold now,” I said.

“I’m sorry. I couldn’t even call. The boss insisted I go out to that new construction site and settle the change of plans with the foreman. I couldn’t even get to a phone to call you ... thanks for not being mad.”

Aunt Rosie was right, I thought. If I had hit him full tilt with anger, we’d have just had a big fight. I smiled at him.

“Well, it can’t be undone now, I guess,” I told him. I wasn’t feeling angry anymore.

Les put down his briefcase and drew me into his arms. “Tell you what,” he said, “How ’bout Friday night, we’ll go out to eat – just to make up for tonight’s ruined dinner.”

“OK,” I agreed. Then to myself I said, “Thanks, Aunt Rosie, you were right. If you want to solve the problem, don’t let anger take over. Stay in touch with the hurt.”







**Text 2 Directions:** You will read an English text and then be asked to respond to them in two ways in *Thai*: 1) written recall and 2) translation. There will be words, phrases, sentences, or paragraphs which you will not understand, do not let them discourage you. Please focus on what you recognize and understand.

### A Sad, Sad Story

I met him in an ABC coffee shop. He was sitting at a table looking very sad. He was a little man with a large moustache, dresses in ready-made clothes, rather shabby. As I sat opposite him, the waitress came up and asked, 'Anything more?' The little man looked at the clock, and said nervously, 'I – think I'll have a fried egg.' He looked at me and said politely. 'Excuse me, could you tell me if that clock is right?' I looked at my watch. 'Yes.'

'This is awful,' he said. 'What is awful?' I asked. The little man leaned forward. 'You have a kind face,' he said. 'I think I'll ask you to help me. You see, I'm waiting for my wife.' 'Oh,' I said. 'And she's late of course. Why not wait a little longer, you know what a woman are.'

But I've waited nearly four hours. We arranged to meet here at 1:30 and I've been here ever since. After I had been here half an hour I ordered my lunch. When I had had my lunch she hadn't come yet, and I thought I'd be better go home. But then I found I couldn't, because my wife had forgotten to give me – I mean I had come without money. So I couldn't pay the bill.'

'So I thought I'd better take some more lunch: the waitresses don't like people to sit here without having anything. I had to order one thing after another; in short, I've been eating all the time. Soon they'll close the shop, and when they find out I can't pay, they'll send for the police.' He buried his face in his hands. 'This is the last time I'll arrange to meet my wife in a Lyons' shop.'

'Lyons,' I said. 'This is not a Lyons', it's an ABC.' The little man jumped up. 'What, an ABC,' he cried. 'Oh, then I've been waiting in the wrong shop. What shall I do? He looked at me as if he were going to burst into tears. 'Pull yourself together.' I said. 'I'll pay your bill.' The little man's face lit up. He seized my hand and shook it. 'Oh, thank you, how kind you are. Give me your address.'

When two weeks later I entered a Lyons' shop I noticed at the next table a kindly looking gentleman and a small man who was sitting with his back to me. Suddenly I heard the little man saying. 'You have a kind face. I think I'll ask you to help me. You see, I'm waiting for my wife ...'





**Text 3 Directions:** You will read an English text and then be asked to respond the open-ended questions in *Thai* as quickly and as best as you can. There will be words, phrases, sentences, or paragraphs which you will not understand, do not let that discourage you. Please focus on what you recognize and understand.

### Lucy and the Chickens

- 1 Lucy's family had lots of animals. They had cows, horses, and pigs. They also had a dog, a cat, and a bird. Lucy's favorite animals were the chickens. She enjoyed collecting eggs from the henhouse. But she wasn't allowed to gather the eggs by herself.
- 2 "The hook that keeps the henhouse door closed is too high," Dad explained. "You're not tall enough yet to reach the hook and Then fasten it again. If you don't shut the door tightly, the chickens could get out. They might become supper for a coyote or some other wild animal." Lucy's eyes widened. She promised never to open the henhouse door by herself.
- 3 The next morning Dad went to town to get a part to fix the tractor. Mom was talking on the phone to Grandma. All by herself Lucy swept the front porch. She put water in the dog's bowl. By noon the bright sun was shining overhead. Lucy felt thirst after doing her chores outside.
- 4 Lucy went inside the house. She heard her mother still talking to grandma. Lucy got a cool drink of water. Then she went back outside and admired the flower garden. "I'd better water the flowers," Lucy said to herself. "They're probably thirsty."
- 5 After watering the flowers, Lucy glanced toward the henhouse. "I should give the chickens some water. They're probably thirsty, too."
- 6 Lucy filled a big bucket with water. She could barely lift it. She tried dragging the bucket, but the water sloshed out. So she went to get her wagon. Hauling the water in the wagon was easier than carrying it by hand.
- 7 At last Lucy stood at the henhouse door. The hook was high. Even when she stretched on her tiptoes, she couldn't reach it. She looked around and saw a stick on the ground. Using the stick, she pushed and poked at the hook. Soon the hook was free. Slowly the door swung open. Twenty chickens stared at her.
- 8 Lucy considered what her father had said. She remembered her father's warning that a coyote might harm the chickens. However, she did not want the chickens to be thirsty, either.

9 “Look what I brought you,” she said. She went to get the bucket of water. Carefully she lifted the heavy bucket and set it on the ground. When she turned back around, the chickens were rushing through the open door.

10 “No!” Lucy cried, waving her arms. “Get back in there! Shoo!”

11 But it was too late. Lucy started chasing the chickens around the yards. They ran this way and that. They scurried here and

there. They flew and flapped. They fluttered and hopped. The more Lucy chased them, the more they scattered. They went behind trees and haystacks. They went under the tractor and wagon. The chickens didn’t seem to understand that Lucy was trying to save them.

12 By the time Dad got home, Lucy had given up. She was sitting in front of the henhouse crying in despair. Dad noticed the open door. He saw the bucket full of water. It didn’t take him long to guess what was wrong.

13 “Let’s get those chickens back in the henhouse,” he said firmly. He went to get some chicken feed in a bucket. “Here, chick, chick, chick,” he called. He spread the feed on the ground near the henhouse. Soon all the chickens came to eat the feed. One by one, Lucy and Dad caught the chickens. When all the chickens were back in the henhouse, Dad hooked the door. Now the chickens were safe from coyotes.

14 Lucy and Dad walked back to the house. “Your intention was good, and I know that you meant well,” Dad said. “Giving the chickens some water was a fine thought. But it would have been better not to open the door by yourself.” He stopped and looked at Lucy. “It’s a lot easier to keep chickens in than to catch them once they get out. Do you know what I mean?”

15 Lucy nodded. She knew exactly what he meant. She also knew that this was a lesson she would never forget.

(686 words)





**Appendix D2: Sample of Reading Fluency Test**

**Passage 1 with 8 Multiple-Choice Questions**

Name ..... No ..... Section .....

# The Diamond Family

Passage 1: Susan and Sam

Starting time .....

Susan Conley Diamond and Sam Diamond live in Rosebud, a small town in New Jersey. It looks like many other towns in the United States. On Main Street, there is a post office and a police station. The drugstore and the library are down the street. There's also a shopping center, with a supermarket and a department store.

In the middle of Rosebud, near the post office, is Dr. Sam Diamond's office. Everybody in town knows Dr. Diamond. He's a good dentist. He's also a popular person. He likes to tell funny stories to his patients. They forget about their teeth when they listen to him.

Susan Conley is Sam Diamond's wife. She's a scientist with a Ph.D. in biology. She works with a group of scientists in a laboratory in New York City. They're studying the human brain and looking for ways to help people with Alzheimer's and other serious diseases.

Susan usually takes the train from Rosebud to New York. Sometimes she stays at home and works on her computer. She's very happy when she can work at home. But she likes working in the lab with interesting people, and she likes being in an exciting place like New York.

(213 words)

Finishing time.....

Reading time .....



Circle the best answer.

1. This passage is about
  - a. a town called Rosebud, New Jersey.
  - b. Main Street in Rosebud, New Jersey.
  - c. Sam and Susan.
  - d. Susan's job in New York.
  - e. I don't know.
2. According to this passage, Rosebud is
  - a. different from most towns in the United States.
  - b. like many other towns in the United States.
  - c. like no other towns in other countries.
  - d. different from towns in other countries.
  - e. I don't know.
3. In Rosebud, there
  - a. aren't many stores.
  - b. aren't any drugstores.
  - c. is a laboratory.
  - d. is a drugstore.
  - e. I don't know.
4. Dr. Diamond is popular because
  - a. he's a dentist in Rosebud.
  - b. he listens to his patients.
  - c. his office is in Rosebud.
  - d. he tells funny stories.
  - e. I don't know.
5. Susan is
  - a. Sam's wife.
  - b. Sam's patient.
  - c. not from Rosebud.
  - d. popular in Rosebud.
  - e. I don't know.
6. Susan is a
  - a. dentist.
  - b. housewife.
  - c. biologist.
  - d. student.
  - e. I don't know.
7. Susan usually works
  - a. in New Jersey.
  - b. in New York.
  - c. down the street.
  - d. at home.
  - e. I don't know.
8. Susan thinks New York is
  - a. a dangerous place.
  - b. like other cities.
  - c. not a nice place.
  - d. an exciting place.
  - e. I don't know.

Appendix D3: Sample of Student's Answer to Reading Comprehension Tests

Reading Comprehension Test

Name Siri rak Mang Mee No. 49 Section 49

Text B: Comprehension check questions:

Written Recall Please write in Thai everything you can remember from 'Lucy and the chickens'.

1. Describe what you know about Lucy. What does she do? Where does she live? Be as thorough as possible.
2. What do her dad and mom do?
3. Tell what Lucy is not allowed to do. Why not?
4. Describe why Lucy went to the henhouse.
5. Describe what happens to Lucy and the chickens.
6. Tell what Lucy's dad do when he got home.
7. What's the moral of the story?



บ้านของเธอชื่อ นวนิด์ เลี้ยง มากมาย หลายชนิด อยู่พร้อมไปด้วย มี นม และ ไข่  
 โค และอื่นๆ และบ้านของเธออยู่แถวโคดอง ลือลือสามบาทเวลาที่เธอไปเก็บไข่ในเล้าไก่  
 เธอเธอไม่ยอมให้ใครเข้าไปยุ่งเกี่ยวกับเธอ เธอคนหนึ่ง พ่อเธออยู่ไปในเมือง แล้วพ่อเธอเขาก็อยู่  
 อยู่กับย่า ลือลือในนา หันไปไร่ในนาให้พม่า และเธอก็เดินไปที่สวนผลไม้ เธอสนใจก็อยาก  
 และเธอก็... เธอไปในบ้าน เธอเห็น หมู พ่อ ๆ ราวเธอยังคุยกันอยู่ เธอก็ออกมาตอนเย็น  
 อีกด้วย เธอเธอก็เดินไปที่เล้าไก่ เธอไปเธอไป นานๆ ไปได้ไม่กี่วัน ราว 20 สัปดาห์  
 มาที่เธอ เธอรู้สึกรู้สึกไม่พอใจกับที่พ่อ เธอได้หลาย ๆ สัปดาห์แล้วเธอไป เธอรู้สึกดีกับ  
 ที่เธอ เธอทำให้พ่อได้กินเธอนานเข้าให้แล้ว เธอไม่ยอม เธอทำอะไร ก็ได้รับเงินเธอหน่อย  
 เธอได้อะไรของเธอในสวนผลไม้ ที่สูง ๆ กับเธอทำ เธอไม่ยอมเธอกลับมาที่บ้าน เห็นลือลือ  
 เธอเดินเข้าไปหาลือลือ พ่อ เธอขอเธอกินอาหาร ทำให้ได้ โดยเริ่มไปที่ ๆ ๆ ๆ ไปๆ  
 เธอหนักขึ้นเรื่อยๆ เธออยู่ที่นี่ พยายามกิน แล้วเธอ ก็เดินไปที่เล้าไก่ ก็เดินเข้าไปใน  
 เล้า แล้ว พ่อเธอ ลือลือก็ปาดน้ำตา แล้วลือลือก็บอกว่า เธอเดินเข้าไปในบ้าน

### Appendix D3: Sample of Student's Answer to Reading Comprehension Tests

Reading Comprehension Test: Text E

Name: อนุภา มิวัจัน No. 19 Section 10

1. Written Recall Please write in *Thai* everything you can remember from 'Anger'.

1. Who is Aunt Rosie? What did she say?
2. Describe what you know about the writer. What does she do? Where does she live? Be as thorough as possible.
3. Describe what you know about Les. What does he do? Where does he live? Be as thorough as possible.
4. Describe what happens to the writer. How does she feel? What does she think of?
5. Describe what happens to Les. What does he feel?
6. How did Les respond to the writer at the end of the story?
7. Describe what happens at the end of the story. And why?
8. What's the moral of the story?

(b)

Anger  
 เธอรู้สึกโกรธมากที่สามีของเธอไปเที่ยวเตร่กับเพื่อนฝูง  
 ที่ไม่ยอมที่จะเลิกสูบบุหรี่ เธอคิดว่าเขาทำเรื่องที่ไม่ดีกับเธอ  
 ทั้งที่เธอก็พยายามที่จะเลิกสูบบุหรี่แล้ว เธอก็ยังอยากที่จะเลิก  
 ต่อมาเธอจึงบอกสามีของเธอ  
 พ่อสามีกลับมาก็มีปากทอด้วย เขาบอกว่าเธออย่าไปเที่ยวเตร่กับเพื่อนฝูง  
 ที่ไม่ใช่เพื่อนที่ดีของเธอ เธอควรจะอยู่กับเขา เธอควรจะอยู่กับเขา  
 เธอจึงเลิกไปเที่ยวเตร่กับเพื่อนฝูง เธอก็เลิกสูบบุหรี่ เธอจึงเลิกไปเที่ยวเตร่  
 ควบคู่กัน dinner  
 stay in touch with the hurt.

**Appendix D3: Sample of Student's Answer to Reading Comprehension Tests**

Reading Comprehension Test: Text E Name อนุภา ภูมิรักษ์ No. 19 Section 10

2. Please translate the story: 'Anger' into the Thai language.

14

Anger (โกรธโกรธ)  
 Aunt Kone เป็นแม่ที่ดุมาก เธอไม่พอใจที่ลูกๆ ของเธอเล่นคอมพิวเตอร์  
 ใจในเวลารวม สิบสองชั่วโมง  
 ดันคิดว่ามันเป็นคำพูดที่น่ากลัว เธอ รู้สึกเสียใจกับสิ่งที่เธอได้  
 พูดกับลูกๆ เธอ  
 ดันได้เริ่มเรียนรู้เกี่ยวกับ Stay in touch with the heart ดันบอกกับ  
 ลูกๆ ว่า ทักทายกันบ่อยๆ ดันบอกเธอพูดกับลูกๆ เธอด้วย  
 ใจที่จริงใจ  
 ที่จริงตอนนั้น ดันไม่รู้สึกละอายใจ  
 ดันบอกกับลูกๆ ว่า ดันไม่โกรธพวกเธอแล้ว ดันบอกกับลูกๆ ว่า  
 ดันขอโทษที่ ดันได้พูดกับพวกเธออย่างนั้น  
 ดันคิดว่า Aunt Kone พยายามที่จะหาวิธีที่จะทำให้ลูกๆ เธอมีความสุข  
 ดันคิดว่า ดันได้พูดกับลูกๆ เธอด้วยใจที่จริงใจ  
 เธอคิดว่า ดันรักพวกเธอ ดันรักพวกเธอ ดันรักพวกเธอ ดันรักพวกเธอ  
 เธอ Aunt Kone บอกกับลูกๆ เธอว่า เธอไม่โกรธพวกเธอแล้ว เธอ  
 บอกกับลูกๆ เธอว่า เธอไม่โกรธพวกเธอแล้ว

## Appendix D3: Sample of Student's Answer to Reading Comprehension Tests

Unit 8 Name Sarin Mingmai No 43 Section 75

Circle the best answer. Do not look back!

1. This passage is about  
 a. a phone call from Ted.  
 b. family phone calls.  
 c. Ted and his wife, Maria.  
 d. Ted and his sister, Jane.  
 e. I don't know.
2. Ted was calling from  
 a. New York.  
 b. Alaska.  
 c. Brazil.  
 d. his office.  
 e. I don't know.
3. Ted and Jane  
 a. write lots of letters.  
 b. talk every day on the phone.  
 c. never talk.  
 d. use e-mail to "talk".  
 e. I don't know.
4. Ted's wife, Maria, is going to  
 a. become an artist.  
 b. have a baby.  
 c. talk on the phone.  
 d. stop painting.  
 e. I don't know.
5. When they heard the news, Susan and Sam  
 a. were excited.  
 b. didn't say anything.  
 c. weren't interested.  
 d. were upset.  
 e. I don't know.
6. Ted said that Maria  
 a. didn't want to talk.  
 b. was not well at all.  
 c. was tired, but fine.  
 d. didn't want to work.  
 e. I don't know.
7. Ted and Maria are going to  
 a. work for a newspaper.  
 b. work as artists.  
 c. stay in Brazil.  
 d. move to New York.  
 e. I don't know.
8. Susan says Ted and Maria  
 a. should live in New York.  
 b. can stay with them.  
 c. can't live in Rosebud.  
 d. should stay with Jane.  
 e. I don't know.

APPENDIX E

Appendix E1: Scores on Comprehension Pre- & Post-Test: Sections 75 (E1)

No	1 Anger_pre		2 Anger_post		3 Lucy_pre		4 Lucy_post		5 Sad_pre		6 Sad_post	
	recall	tran	recall	tran	recall	tran	recall	tran	recall	tran	recall	tran
2	0.5	9	1	11	7	31.5	9	29	6.5	26.5	7.5	20.5
3	6	13	6	15	6	23	7.5	24	6.5	26	7.5	28.5
4	3	15	7	23	7	35	7	22	7	36.5	8	36.5
5	3	7	6	12	7	36	10	28	6	27.5	7	31
6	3	9	7	19	4.5	23.5	6.5	21	5	31.5	8	37.5
7	1	2	5	11	6	24.5	6.5	16	1	26	6.5	22
8	9	27	8	28	10	62.5	10	62.5	8	44.5	9.5	46
9	8	25	7	27	8	53.5	10	52.5	8	41	10	39.5
10	3	8	5	4.5	1.5	15.5	7	16	0.5	2	5	7.5
11	7	20	7	28.5	8	47	10	32	5	35	7	40
12	0	2	5	10	7	18.5	9	14	6	20.5	7	13.5
13	3	11	5	13.5	7	30.5	8	29	7	35.5	8	31.5
14	4	12	4	13.5	7	26.5	8	13	5	29.5	5.5	22.5
15	6.5	15	7	24	8	46.5	9	16	7	39	6.5	36.5
16	1	2	0	2	3	9	6	10.5	2	6.5	2.5	9
17	6	20	7	22	5	33	7	27.5	4	21.5	7	22.5
18	1	0	1	5.5	5.5	5	2	5.5	0.5	2	0	5.5
19	3	4	2	3	6	22	5	14	0.5	2	5	1
20	6	12	5	9	4	19.5	9	18	5	20.5	5	29.5
21	8	13	6	13.5	3	23.5	5	16	4	18	5.5	17.5
22	7	8	3	16	6.5	24	7.5	23.5	7	25.5	7	24.5
23	6	6	6	15	5	15.5	7	16.5	5	19.5	7	19
25	0	0	3	3	3.5	9.5	6.5	17	0.5	2	4.5	8.5
27	0	3	0	3.5	3	15.5	5	18.5	4	12.5	2.5	21
28	4	9	0	11.5	8	39.5	7.5	35	5.5	32.5	6.5	31
29	3	15	2	14	7	32.5	7	41	4	33.5	6.5	34.5
30	0	4	0	6.5	8	20	6.5	18	4	17.5	4	19.5
31	3	7	3	16	6.5	33.5	7.5	36.5	2	22.5	7	34.5
32	2	8	8	21.5	6.5	28	7	26	0.5	20	7	24
33	5	15	5	21.5	9	32	9	36.5	6	25	5	26
34	5	18	6	17.5	6.5	35.5	7	32.5	6	39	9	42
35	2	8	6	14.5	6.5	23	7	25	7	24	7	35.5
36	0	3	1	2	1	14.5	1.5	10.5	0	12.5	2	2.5
37	6	17	7	27	9	47.5	10	42.5	7	40	8.5	40
38	5	14	6	14.5	6	35	7	23.5	3	24.5	6.5	29.5
39	4	13.5	6	18.5	5	24.5	5.5	23.5	1.5	27	4.5	16
40	1	12	5	23.5	5.5	36	6.5	44.5	7	36	8	33.5
41	0	8	4	6	1	12	3	13.5	2	17	5.5	25
42	5	9	5	13.5	6.5	24	7	18.5	8	25	6	25
43	3	15	7	10	5.5	32.5	7	28.5	8	31	6.5	24
44	6	31	5	31	9	59.5	7	49	8	43	5	42
47	0	3	2	3.5	0.5	5.5	1	6.5	0	2.5	0	1
48	1.5	8	3.5	9	2	13	2.5	16	0	17	0.5	17
49	1	5	0	6	2	16	1.5	11	0	7	0.5	6
50	1	4	1.5	8	3.5	13	3.5	7	2	12.5	1	9
52	0	0	0	0	0.5	4.5	1	10	1	4	0.5	5

**Appendix E2: Scores on Comprehension Pre- & Post-Test: Sections 76 (E2)**

No.	1 Anger_pre		2 Anger_post		3 Lucy_pre		4 Lucy_post		5 Sad_pre		6 Sad_post	
	recall	tran	recall	tran	recall	tran	recall	tran	recall	tran	recall	tran
3	3.5	16.5	7	19	7	38.5	8.5	33.5	5	23	8	25.5
4	3	17	5	7	1	20	6.5	19	4	19	7	15
7	2	3.5	5	8.5	6.5	21	7	20	4.5	15.5	8	21
9	2	17	5	15.5	2	18.5	5	23.5	4	21	6	26.5
10	2	9	5	12	6	16.5	4	11.5	4	5.5	7	17.5
11	2	12	6	18	6.5	30	7.5	18	4	29	7	27.5
13	2	15.5	3	10	3.5	19	2.5	10.5	3.5	24.5	8	21.5
14	3	22	6	25.5	6	32.5	8	40	4	28	9	33.5
16	2.5	11.5	5	10.5	3	17	6	17.5	3	11	9	21
18	2	6	6	7	3	8.5	5	12	4	11	8	13
19	9	24	7	25	4	22.5	4.5	26	4.5	27.5	8	36
20	6.5	21.5	7	16.5	7	36	9	26.5	9.5	31.5	9	30.5
21	2	10	4	12	3	15	6	13.5	4	16.5	9	20.5
23	1.5	16	3	13.5	2.5	25	5	30	2	25.5	8.5	34
24	5	16	3	6	1.5	11.5	5.5	12.5	1	22	1	11
25	1.5	7	2	6	0.5	6	6	7	0	2	4	6.5
26	2	14	7	21.5	3.5	27.5	7	20	4.5	14.5	9	32
27	3.5	9.5	3	14.5	4.5	26	6	20	4.5	22	7	24.5
28	5	14.5	6.5	16.5	6.5	28	6.5	24	8	21.5	9	22
29	2	7.5	3	7.5	0.5	9	3	9	0	7	7	10
30	3	18	5	4.5	4	26	7	11	7	19	9	31.5
32	1.5	12	2	7.5	0.5	14.5	3	12	1	10.5	7	14
33	2	21.5	5	17.5	5	35	7	39	7.5	41.5	9	39.5
34	1.5	6	2	3.5	2	18	5	11.5	7	19	9	21
35	5	14.5	2	5	0.5	12.5	6.5	10	2	10.5	7	16
36	6	7	6	6.5	0.5	8	5.5	5.5	0.5	3	6	5
37	7	17	9	22.5	1	18.5	7	22	0.5	11	8	19.5
38	2	12	4	5	0.5	4.5	6.5	11.5	3	12	7	14
39	2	17.5	6	17	7	31	6.5	20	7	34	8	27.5
40	2	14.5	5	6	1	19.5	6.5	11	4.5	22	7	14
41	6	28	8	33.5	7	43	6.5	25.5	9	44	9.5	36.5
42	2	16.5	4	20.5	0.5	17.5	4	8.5	4.5	26.5	7	29
43	4	5.5	4	5	0.5	14	5	14	0.5	6	4.5	4
45	2	13.5	4	24	5	44.5	8	40.5	8	36	7	40
49	7	20	6	24.5	3	29.5	7	21.5	8	30	8	32.5
51	2	17.5	6	20.5	5	33	6.5	15	4.5	29	8	32

**Appendix E3: Scores on Comprehension Pre- & Post-Test: Sections 61 (C1a)**

No	1 Anger_pre		2 Anger_post		3 Lucy_pre		4 Lucy_post		5 Sad_pre		6 Sad_post	
	recall	tran	recall	tran	recall	tran	recall	tran	recall	tran	recall	tran
	(10)	(37)	(10)	(37)	(10)	(78)	(10)	(78)	(10)	(50)	(10)	(50)
13	0.5	1	0.5	2	1.5	7	4.5	7	4	11	5	5
15	0	4	0.5	3.5	1	8	1	6	0	2.5	0	1
17	0	4	0.5	2.5	2	12	4	11.5	3.5	21	4.5	15
19	1	12	5	12	0	14	1	8	7	37	8.5	28.5
20	0.5	2	0.5	1	1	7.5	3	10	0	2	0.5	6
22	1	2	1	5	8	23.5	9	36.5	6	8	7	13
25	2	20	6	15	8.5	32	8.5	25	9	33.5	10	40.5
29	0.5	2.5	0.5	9	8	21.5	8	22.5	8.5	26	7	19.5
32	9	23	8	19	7	16.5	5	23	7	25.5	6	27.5
37	1	11.5	2	8.5	1	16.5	2	18.5	4	19	1	9
41	0	1	0.5	1.5	3	11	3	12	1	2.5	1	5.5
45	0	3	2	3	0.5	11	1	9.5	1	15.5	3	10.5
46	0	11	0.5	4	4	11	2	12	1	30	2	11
48	0.5	3	2	6.5	1	7.5	1	15.5	1	9	4	11
49	0.5	7	2	12.5	0.5	4.5	1	10	1	13.5	2	16



**Appendix E4: Scores on Comprehension Pre- & Post-Test: Sections 10 (C1b)**

No.	1 Anger_pre		2 Anger_post		3 Lucy_pre		4 Lucy_post		5 Sad_pre		6 Sad_post	
	recall	trans	recall	trans	recall	trans	recall	trans	recall	trans	recall	trans
	(10)	(37)	(10)	(37)	(10)	(78)	(10)	(78)	(10)	(50)	(10)	(50)
15	2	14.5	1	10	8	39	2.5	13	6	38	7	28
16	0.5	2	1	4.5	4	10	7	14	0.5	4.5	6.5	10
17	0.5	4	2	3.5	1.5	5	2	7.5	0	6	7	15
18	3	3.5	2	7	4.00	16.5	5	18.5	6.5	34	7	19
19	6	10	6	14	7	24.5	7	19	6	30	7	37.5
20	1.5	10	6	4.5	6	26	5.5	15.5	4	19.5	8	14
23	1	9.5	3	10.5	1.5	9	7	19.5	5	16	7	23.5
24	1	6	2.5	0.5	5	18.5	6.5	21	3	21	8	21
25	0.5	4	6	8	6	13.5	8.5	14	0.5	9	7	15
26	1	8.5	1	12	2	20.5	6	11.5	5.5	27	7	15
27	6.5	21.5	9	27.5	9	55.5	10	46	7	38	9.5	38
29	6.5	22.5	7.00	25.00	7	35	8	26	9	41	8.5	32.5
30	7.5	29	7	23.5	8	48.5	9	50	9	37.5	9.5	43
31	0	2	1	3.5	0.00	5.00	1	10.5	0.5	7	3	6
32	1	11	2	13.5	2	23	4	29.5	5.00	13.00	8	18.5
33	5	9	1	4	2	15	6	14	5	25	7	20.5
34	2	4.50	5	11	1.5	17	6.5	30.5	1	10.5	7	19
35	1	7	4.00	11.00	2	17	8	14.5	0.5	4	7	14
37	1	4.5	5	6	7	25	7	15.5	4	16.5	7	20.5
38	0	0	2	4	1.5	13.5	8	27	0.5	7	8	22.5
39	6	7.5	5	10.5	6	13	7.5	16.5	0.5	4.5	8	14
41	0	4	4	6	5	14.5	4	10	5.5	12.5	7	10
42	4	2	4	4.5	6	19.5	7	18.5	0.5	4	7.5	14
43	3	9.5	1	4	7	36.5	5	16	7	34	7	24
44	1	8	1.5	4	4	20	5.5	16.5	1.00	4.00	7	12
45	4.00	20.00	6	22	5	53.5	3	38.5	9	41	7	36.5
46	2	7	5	8	7	35.5	7.5	26.5	4.5	23.5	8.5	20.5
47	1	6.5	1	7.5	6	14	6	17	2.5	10	5	14
48	2	6.5	7	8.5	2	7.5	3.5	10.5	6	8.5	4	13

**Appendix E5: Scores on Comprehension Pre- & Post-Test: Sections 45 (C2a)**

No	1 Anger		2 Lucy		3 Sad	
	Recall	Tran	Recall	Tran	Recall	Tran
	(10)	(37)	(10)	(78)	(10)	(50)
6	6	7	7	13	6	8
7	0	4	1	7.5	8	13
14	3	7	4	20	8	23.5
15	0	3	3	19	8	17
23	5	20	8.5	49	5	33
25	2	5	1	7.5	4	4.5
26	1	0	1.5	4	7	1.5
27	0	5.5	2	19.5	3	16
29	1	7	1.5	17	7	11
33	9	32.5	9.5	58	9	42
35	0.5	15.5	6.5	28.5	3	30
36	1	4	6.5	24	6	13.5
42	1	11	3	25.5	7	28
46	2	5	1	4.5	7	14
47	3	4	1.5	14	5	9.5
49	0	8.5	3	17.5	8	20.5

**Appendix E6: Scores on Comprehension Pre- & Post-Test: Sections 49 (C2b)**

No	1 Lucy		2 Sad		3 Anger	
	recall	tran	recall	tran	recall	tran
	(10)	(78)	(10)	(50)	(10)	(37)
2	0.5	8	0	1	0	5
3	2	9	0	5.5	1	6
4	5	27.5	4	17.5	1	8
5	0	12.5	0	8	0	5
43	1	10.5	6.5	12.5	0	6
44	1	14	0.5	2	0	5.5
45	0.5	7	0.5	4	0	8.5
46	2	15.5	5	2	0	5
47	7	20	7	9.5	0.5	3.5
48	6	21	6.5	16	0.5	1.5
49	1	10.5	6.5	3	0	0
50	5	28	6.5	15.5	1	11

## CHAPTER 7

### REFERENCES

- Adams, M. (1990). Beginning to read: Thinking and learning about print.  
Cambridge, MA: MIT Press.
- Alderson, J. C. (1984). Reading in a foreign language: a reading problem or a  
language problem?. In J. C. Alderson & A. H. Urquhart (Eds.), Reading in  
a foreign language (pp. 1-24). Singapore: Longman Group Limited.
- Alderson, J. C. (2005). Assessing reading. New York: Cambridge University  
Press.
- Al-Homoud, F., & Schmitt, N. (2009). Extensive reading in a challenging  
environment: A comparison of extensive and intensive reading approaches  
in Saudi Arabia. Language Teaching Research, 13(4), 383-401.
- Allen, E. D., Bernhardt, E. B., Berry, M. T., & Demel, M. (1988). Comprehension  
and text genre: An analysis of secondary school foreign language readers.  
The Modern Language Journal, 72, 163-172.
- Anderson, R.C., Heibert, E., Scott, J., & Wilkinson, I. (1985). Becoming a nation  
of readers. Washinton, D. C.: National Institute of Education.
- Anderson, R. C., & Pearson, P. D. (1984). A schema-theoric view of basic  
processes in reading comprehension. In P. D. Pearson, R. Barr, M. L.  
Kamil, & P. Mosenthal (Eds.), The handbook of reading research (pp. 255-  
292). New York: Longman.
- Appel, G., & Lantolf, F. (1994). Speaking as mediation: A study of L1 and L2 text  
recall tasks, The Modern Language Journal, 78(iv), 437-452.
- Apple, M. T. (2005). Extensive reading and the motivation to read: a pilot study.  
Dishisha Studies in Language and Culture, 8(1), pp. 193-212.

- Asraf, R. M., & Ahmad, I. S. (2003). Promoting English language development and the reading habit among students in rural schools through the Guided Extensive Reading program. Reading in a Foreign Language, 15(2), 83-120.
- Baker, L., & Brown, A. (1984). Metacognitive skills and reading. In P. D. Pearson, R. Barr, M. L. Kamil, & P. Mosenthal (Eds.), The handbook of reading research (pp. 353-394). New York: Longman.
- Bamford, J., & Day, R. R. (1997). Extensive reading: What is it? Why bother? The Language Teacher, 21, 6-8.
- Barnette, M.A. (1986). Syntactic and lexical/ semantic skill in foreign language reading: Importance and interaction. The Modern Language Journal, 70, 343-349.
- Barnette, M.A. (1988). Teaching reading strategies: How methodology affects language course articulation. Foreign language Annals, 21(2), 109-119.
- Barnette, M.A. (1989). More than meets the eye: foreign language reading. Englewood Cliffs, NJ: Prentice Hall Regents.
- Bell, T. (1998). Extensive reading: Why and how? The internet TESL Journal [On-line], 4(12). Available: <http://iteslj.org/Articles/Bell-Reading.html>
- Bell, T. (2001). Extensive reading: speed and comprehension. The Reading Matrix, 1(1) April. Available: <http://www.readingmatrix.com/articles/bell/article.pdf>
- Bernhardt, E. B. (1983). Three approaches to reading comprehension in intermediate German. The Modern Language Journal. 67, 111-115.
- Bernhardt, E. B. (1991). Reading development in a second language: Theoretical, empirical, and classroom perspectives. Norwood, NJ: Ablex.

- Birch, B. M. (2002). English L2 reading: Getting to the bottom. USA: Lawrence Erlbaum Associates.
- Björnsson, C. H. (1968). Lesbarkeit durch Lix. Stockholm, Sweden: Pedagogiskt Centrum.
- Björnsson, C. H. (1983). Readability in newspapers in 11 languages. Reading Research Quarterly, 18(4), 480-497.
- Blaikie, N. (2007). Approaches to social enquiry (2<sup>nd</sup> ed.). Oxford, UK: Polity Press.
- Boonpatanaporn, P. (1985). Comparison of business English reading comprehension between business program students in upper secondary level and those in technical college. Unpublished master's thesis, Chulalongkorn University, Thailand.
- Bormuth, J. R. (1967). Comparable cloze and multiple-choice comprehension test scores. Journal of Reading, 10, 291-299.
- Bormuth, J.R. (1968). The cloze readability procedure. In J.R. Bormuth (Ed.), Readability in 1968. (pp. 50-77). Champaign, IL: National Council of Teachers of English.
- Bransford, J. D. (1979). Human cognition: Learning, understanding and remembering. Belmont, CA: Wadsworth.
- Bransford, J, Stein, B., & Shelton, T. (1984). Learning from the perspective of the comprehender. In C. Alderson & A. Urquhart (Eds.), Reading in a Foreign Language (pp. 28-44). New York: Longman.
- Brantmeier, C. (2001). Second language reading research on passage content gender: Challenges for the intermediate level curriculum. Foreign Language Annals. 34, 325-333.

- Brantmeier, C. (2003). Does gender make a difference? Passage content and comprehension in second language reading. Reading in a Foreign Language, 15, 1-27.
- Brantmeier, C. (2006). Toward a multicomponent model of interest and L2 reading: Sources of interest, perceived situational interest, and comprehension. Reading in a Foreign Language, 18(2), 1-27.
- Brown, A, Armbruster, B., & Baker, L. (1986). The role of metacognition in reading and studying. In J. Orasanu (Ed.), Reading comprehension: from theory to practice (pp. 49-75). Hillsdale, NJ: Lawrence Erlbaum.
- Brown, H. D. (1994). Teaching by principles. USA: Pearson Education.
- Brown, H. D. (1987). Principles of language learning and teaching (3rd ed). USA: Pearson Education.
- Bryman, A. (1993). Quantity and quality in social research, New York: Routledge.
- Burmeister, L.E. (1974). Reading strategies for secondary school teachers. USA: Addison-Wesley Publishing Co.
- Camiciottoli, B. C. (2001). Extensive reading in English: Habits and attitudes of a groups of Italian university EFL students. Journal of Research in Reading, 24(2), 135-153.
- Carpenter, P., & Just M. (1986). Cognitive process in reading. In J. Orasanu (Ed.), Reading comprehension: from theory to practice (pp. 11-29). Hillsdale, NJ: Lawrence Erlbaum.
- Carr, T., & Levy, B. (Eds.). (1990). Reading and its development: components skills approaches. San Diego: Academic Press.

- Carrell, P. L. (1983). Some issues in studying the role of schemata, or background knowledge, in second language comprehension. Reading in a Foreign Language, 1(2), 81-92.
- Carrell, P. L. (1984a). The effects of rhetorical organization on ESL readers. TESOL Quarterly, 18(3), 441-69.
- Carrell, P. L. (1984b). Evidence of a formal schema in second language comprehension. Language Learning, 34, 87-112.
- Carrell, P. L. (1984c). Schema theory and ESL reading: Classroom implications and applications. The Modern Language Journal, 68, 332-343.
- Carrell, P. L. (1985). Facilitating ESL reading by teaching text structure. TESOL Quarterly, 19, 727-752.
- Carrell, P. L. (1988). Some causes of text-boundedness and schema interferences in ESL reading. In P. Carrell, J. Devine & D. E. Eskey (Eds.), Interactive approaches to second language reading (pp. 103-113). New York: Cambridge University Press.
- Carrell, P. L. (1989). Metacognitive awareness and second language reading. The Modern Language Journal, 73(2), 121-134.
- Carroll, J.B., Carton, A.S. & Wilds, C.P. (1959). An investigation of "cloze" items in the measurement of achievement in foreign languages. Cambridge, MA: Laboratory for Research in Instruction, Graduate School of Education, Harvard University.
- Chang, Y. F. (2006). On the use of the immediate recall task as a measure of second language reading comprehension. Language Testing, October, 23(4): 520-543.



- Chiang, I. N. (2009). Can children and parent read happily ever after? An investigation of extensive reading in Taiwan. Unpublished doctoral dissertation, Newcastle University, United Kingdom.
- Cho, K., & Krashen, S. (1994). Acquisition of vocabulary from the Sweet Valley Kids series: Adults ESL acquisition. Journal of Reading, 37(8), 662-667.
- Clarke, M. A. (1980). The “short-circuit” hypothesis of ESL reading – Or when language competence interferes with reading performance. The Modern Language Journal, 64, 203-209.
- Clarke, M. A. & Silberstein. S. (1977). Toward a realization of psycholinguistic principles in the ESL reading class. Language Learning, 27(1), 135-54.
- Coady, A. (1993). Research on ESL/EFL vocabulary acquisition: Putting it in context. In T. Huckin, M. Haynes & J. Coady (Eds.), Second language reading and vocabulary learning (pp. 3-33). Norwood, NJ: Ablex.
- Coady, J. (1979). A psycholinguistic model of the ESL reader. In R. Mackey, B. Barkman & R. R. Jordan (Eds.), Reading in a second language: Hypotheses, organization, and practice (pp. 106-141). Rowley, MA: Newbury House.
- Coady, J. (1997). Extensive reading. In J. Coady & T. Huckin (Eds.), Second language vocabulary acquisition: a rationale for pedagogy. Cambridge: Cambridge University Press.
- Connolly, P. (2006), Quantitative data analysis in education. Great Britain: Routledge.
- Cook, T. D., & Campbell, D. T. (1979). Quasi-experimentation: Design and analysis issues. Chicago: Rand McNally.
- Cramer, D. 1994. Introducing statistics for social research. London: Routledge.

- Cramer, D. (1996). Basic statistics for social research: Step-by-step calculations & computer techniques using minitab. Great Britain: Routledge.
- Creswell, J. W. (2008). Educational research (3<sup>rd</sup> ed.). New Jersey: Pearson Education.
- Crotty, M. (1998). The foundations of social research. Singapore: SAGE Publications:
- Curriculum and Development Centre. (1985). How do the children of new curriculum learn English? Prachakorn Suksa, 11 (4), April. Bangkok: Department of General Education.
- Day, R. R., & Bamford, J. (1998). Extensive reading in the second language classroom. Cambridge: Cambridge University Press.
- Day, R.R., & Bamford, J. (2002). Extensive reading in the second language classroom (4<sup>th</sup> ed.). Cambridge: Cambridge University Press.
- Day, R.R., & Bamford, J. (2004). Extensive reading in the second language classroom (5<sup>th</sup> ed.). Cambridge: Cambridge University Press.
- Day, R.R., & Bamford, J. (2005). Extensive reading in the second language classroom (6<sup>th</sup> ed.). Cambridge: Cambridge University Press.
- Davies, A. (1990) Principles of language testing. London: Blackwell.
- Davies, M. B. (2007). Doing a successful research project. China: Palgrave Macmillan.
- Davis, C. (1995). Extensive reading: an expensive extravagance. ELT Journal, 49(4), 329-336.
- Davis, J. (1989). Facilitating effects of marginal glosses on foreign language reading. The Modern Language Journal, 73(1), 41-48.
- Day, R., Omura, C., & Hiramatsu, M. (1991). Incidental EFL vocabulary learning and reading. Reading in a Foreign Language, 7, 541-551.

- Della Piana, G. M., & Endo, G. T. (1993). Reading research. In Travers, R. M. W. (Ed.), Second handbook of research on teaching (pp. 883-925). Chicago: Ran McNally for A.E.R.A.
- Department of Curriculum and Instruction Development. (1998). Activities handbook for teaching English at lower and upper secondary levels. Bangkok: Kurusapa Press.
- de Vaus, D. A. (1986). Survey in social research. Australia: Routledge.
- Devine, J. (1988). The relationship between general language competences and second language reading proficiency: Implications for teaching. In P. L. Carrell, J. Devine, & D. E. Eskey (Eds.), Interactive approaches to second language reading (pp. 260-277). Washington, DC: TESOL.
- Dörnyei, Z. (2003). Questionnaires in second language research: Construction, administration, and processing. USA: Lawrence Erlbaum Associates.
- Dörnyei, Z. (2007). Research methods in applied linguistics. China: Oxford University Press.
- Dupuy, B. & Krashen, S. (1993). Incidental vocabulary acquisition in French as a foreign language. Applied Language Learning, 4, 55-63.
- Dupuy, B., Tse, L., & Cook, T. (1996). Bringing books into the classroom: First steps in turning college-level ESL students into readers. TESOL Journal, 5(4), 10-15.
- Elley, W. B. (1981). The impact of a book flood in Fiji primary schools. Wellington: New Zealand Council for Education Research.
- Elley, W. B. (1991). Acquiring literacy in a second language. Language Learning, 4(3), 375-411.
- Elley, W. B., & Mangubhai, F. (1983). The impact of reading on second language learning. Reading Research Quarterly, 19(1), 53-67.

- Ellis, R. (1999). Learning a second language through interaction (Studies in bilingualism volumn 17). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Engineer, W. (1977). Proficiency in reading English as a second language. Unpublished master's thesis, University of Edinburgh.
- Eskey, D.E. (1973). A model program for teaching advanced reading to students of English as a foreign language. Language Learning, 23(2), 169-184.
- Eskey, D. E. (1986). Theoretical foundations. In F. Dubin, D. E. Eskey & W. Grabe (Eds.), Teaching second language reading for academic purposes (pp. 3-23). Reading, MA: Addison-Wesley.
- Eskey, D. E. (1988). Holding in the bottom: An interactive approach to the language problems of second language readers. In P.L. Carrell, J. Devine, D. E. Eskey (Eds.), Interactive approaches to second language reading (pp. 93-100). Cambridge: Cambridge University Press.
- Far, J. N., & Jenkins, J. J. (1949). Table for use with the Flesch readability formulas. Journal of Applied Psychology, 33, 275-278.
- Fay, B. (1996). Contemporary philosophy of social science, Oxford: Blackwell.
- Fernald, L. D. (1987). Of windmills and rope dancing: The instructional value of narrative text structures. Teaching of Psychology, 14, 214-216.
- Field, A. (2009). Discovering statistics using SPSS (3<sup>rd</sup> ed.). Dubai: SAGE Publications.
- Field, A., & Hole, G. (2006). How to design and report experiments. London: SAGE Publications.
- Field, M. L. (1985). A psycholinguistic model of the Chinese ESL reader. In P. Larson, E. L. Judd, & D. S. Messerschmitt (Eds.), On TESOL'84: A brave new world for TESOL (pp. 173-183). Washington, DC: TESOL.

- Fink, A. (1998). Conducting research literature reviews. USA: SAGE.
- Finn, M., Elliott-White, M., & Walton, M. (2000). Tourism and leisure research methods. Malaysia: Pearson Education.
- Flesh, R. F. (1948). A new readability yardstick. Journal of Psychology, 32(3), 221-233.
- Flesch, R. F. (1950). Measuring the level of abstraction. Journal of Applied Psychology, 34, 384-390.
- Flores d'Arcais, G. (1990). Praising principles and language comprehension during reading. In D. Balota, G. Flores d'Arcais & K. Rayner (Eds.), Comprehension process in reading (pp. 100-130). Hillsdale, NJ: Lawrence Erlbaum.
- Foster, J. J. (1998). Data analysis using SPSS for Windows. SAGE Publications: London.
- Fry, E. (1965). Teaching faster reading: A manual. Cambridge, England: Cambridge University.
- Fry, E. (1968a). A readability formula that saves time. Journal of Reading, 11, 513-516, 575-578.
- Fry, E. (1968b). A readability graph validated at primary levels. Technical Report No. 2, Contract No. OEG-0-8-085762-2502(056). Harvard Computer-Aided Instruction Laboratory.
- Fry, E. (1969). A readability graph for librarians, part I. School Libraries, Fall, 19, 13-16.
- Fry, E. (1977). Fry's readability graph: Clarifications, validity, and extension to level 17. Journal of Reading, 20, 242-252.
- Fry, E. (1991). Ten best ideas for reading teachers. In E. Fry (Ed.), Ten best ideas for reading teachers (pp. 6-16). Menlo Park, CA: Addison-Wesley.

- Færch, C., & Haastrup, K. (1984). Learner language and language learning, Denmark: Multilingual Matters, Ltd.
- Gaver, M. V. (1969). A readability graph for librarians, part II. School Libraries, Fall, 19, 23-25.
- Glazer, S. M., Searfoss L. W., & Gentile, L. M. (1990). Reexamining reading diagnosis: new trends and procedures. Delaware: International Reading Association.
- Goodman, K. S. (1967). Reading: A psycholinguistic guessing *game*. Journal of the Reading Specialist, 6, 126-35.
- Goodman, K.S. (1968). The Psycholinguistic nature of the reading process. Detroit, MI: Wayne State University Press.
- Goodman, K. S. (1969). Analysis of oral reading miscues: Applied psycholinguistics. Reading Research Quarterly, 5, 9-30.
- Goodman, K.S. (1982). Process, theory, research. (Vol. 1). London: Routledge and Kegan Paul.
- Gough, P., & Wren, S. (1999). Constructing meaning: The role of decoding. In J. Oakhill, & S. Beard, (Eds.), Reading development and the teaching of reading (pp. 59-78). Malden, MA: Blackwell.
- Grabe, W. (1986). The transition from theory to practice in teaching reading. In F. Dubin, D. E. Eskey, & W. Grabe (Eds.), Teaching second language reading for academic purposes (pp. 25-48). Reading, MA: Addison-Wesley.
- Grabe, W. (1988). Reassessing the term “interactive.” In P. L. Carrell, J. Devine, & D. E. Eskey (Eds.), Interactive approaches to second language reading (pp. 56-70). Cambridge: Cambridge University Press.

- Grabe, W. (1991). Current, developments in second language reading research. TESOL Quarterly, 25(3), 375-406.
- Grabe, W. (2009). Reading in a second language: Moving from theories to practice. New York: Cambridge University Press.
- Grabe, W., & Stoller, F. L. (2002). Teaching and researching reading. Malaysia: Pearson Education.
- Graddol, D. (2004, February 26). English won't dominate as world language. Associated Press [On-line]. Available: [www.msnbc.msn.com/id/4387421](http://www.msnbc.msn.com/id/4387421)
- Gradman, H., & Hamania, E. (1991). Language learning background factors and ESL proficiency. The Modern Language Journal, 75(1), 39-50.
- Guba, E. G. (1990). The alternative paradigm dialog. In E. G. Guba (Ed.), The paradigm dialog (pp. 17-30). USA: SAGE Publication Inc.
- Hafiz, F., & Tudor, I. (1989). Extensive reading and the development of language skills. ELT Journal, 43(1), 4-13.
- Hafiz, F., & Tudor, I. (1990). Graded readers as an input medium in L2 learning, System, 18, 31-42.
- Hague, P. (1998). Questionnaire design. England: Clays Ltd.
- Hague, P., & Harris, P. (1994). Sampling and statistics. England: Clays Ltd.
- Hall, W., White, T., & Guthrie, L. (1986). Skilled reading and language development: Some key issues. In J. Orasanu (Ed.), Reading comprehension: From research to practice (pp. 89-111). Hillsdale, NJ: Lawrence Erlbaum.
- Harrison, A. (1993). A language testing handbook. Hong Kong: Macmillan Press Ltd.
- Harrison, C. (1984). Readability in the classroom. New York: Cambridge University Press.

- Haynes, M., & Carr, T. (1990). Writing system background and second language reading: A component skills analysis of English reading by native speaker-reader of Chinese. In T. Carr & B. Levy (Eds.), Reading and its development: Components skills approaches (pp. 375-422). San Diego: Academic Press.
- Hidi, S., Baird, W., & Hildyard, A. (1982). That's important, but is it interesting? Two factors in text processing. In A. Flammer & W. Kintsch (Eds.), Discourse Processing, (pp. 65-75). Amsterdam: North Holland.
- Hill, D. (1997). Survey review: Graded readers. ELT Journal, 51(1), 57-81.
- Hill, D. (2001). Survey review: Graded readers. ELT Journal, 53(3), 300-324.
- Hill, D. R., & Thomas, R. H. (1988). Survey review: Graded readers (Part I). ELT Journal, 42(1), 44-52.
- Hitosugi, C. I., & Day, R. (2004). Extensive reading in Japanese. Reading in a Foreign Language [On-line], 16(1), 20-39. Available: <http://www.NetLibrary.com>
- Horst, M., Cobb, T., & Meara, P. (1998). Beyond a Clockwork Orange: acquiring second language vocabulary through reading. Reading in a Foreign Language, 11(2), 207-223.
- Hu, M., & Nation, P. (2000). Unknown vocabulary density and reading comprehension. Reading in a Foreign Language, 13, 403-430.
- Huey, E. B. (1908). The psychology and pedagogy of reading. New York: MIT Press.
- Hurston, Z. N. (1942). Dust tracks on a road. USA: J. B. Lippincott, Inc.
- Hussey, J., & Hussey, R. (1997). Business research: A practical guide for undergraduate and postgraduate students. China: Palgrave Macmillan.



- Iwahori, Y. (2008). Developing reading fluency: A study of extensive reading in EFL. Reading in a Foreign Language, 20(1), 70-91.
- Janopolous, M. (1986). The relationship of pleasure reading and second language reading proficiency. TESOL Quarterly, 20(4), 763-768.
- Jarvis, H., & Atsilarat, S. (2004). Shifting paradigms: from a communicative to a context-based approach. Asian EFL Journal, 6(4), 1-14.
- Johnson, R. (1970). Recall of prose as a function of the structural importance of the linguistic units. Journal of Verbal Learning and Verbal Behaviour, 9(1), 12-20.
- Johnson, R. B., & Christensen, L. (2004). Education research: quantitative, qualitative and mixed approaches (2<sup>nd</sup> ed.). Boston: Allyn and Bacon.
- Johnston, P. H. (1983). Reading comprehension assessment: a cognitive basis. Delaware: International Reading Association.
- Just, M., & Carpenter, P. (1987). The psychology of reading and language comprehension. Boston: Allyn & Bacon.
- Kamil, M. L., Lnger, J. A., & Shanahan, T. (1985). Understanding research in reading and writing. Boston: Allyn and Bacon.
- Kelly, L. G. (1969). 25 centuries of language teaching. Rowley, MA: Newbury House.
- Kinncar, P. R., & Gray, C. D. (2006). SPSS 14 made simple. Great Britain: TJ International Ltd.
- Kintsch, W., & van Dijk, T. A. (1978). Toward a model of text comprehension and production. Psychological Review, 85, 363-394.
- Klare, G. R. (1963). The measurement of readability. Ames, IA: Iowa State University Press.

- Klare, G. R. (1974-75). Assessing readability', Reading Research Quarterly, 10(i), 63-102.
- Ko, M.H. (2005). Glosses, comprehension, and strategy use. Reading in a Foreign Language, 17(2), 125-143. Available:  
<http://nflrc.hawaii.edu/rfl/October2005/ko/ko.html>
- Kobayashi, M. (1995). Effects of text organization and test format on reading comprehension test performance. Unpublished doctoral dissertation, Thames Valley University, United Kingdom.
- Kobayashi, M. (2002). Method effects on reading comprehension test performance: text organization and response format, Language Testing, 19(2), 193-220.
- Koda, K. (2005). Insights into second language reading. New York: Cambridge University Press.
- Krashen, S. D. (1982). Principle and practices in second language acquisition. New York: Prentice Hall.
- Krashen, S. D. (1993a). The power of reading: Insight from the research. Englewood, CO: Libraries Unlimited, INC.
- Krashen, S. D. (1993b). The case for free voluntary reading. The Canadian Modern Language Review, 50(1), 72-82.
- Krashen, S. D. (1995) Free voluntary reading: Linguistic and affective arguments and some new applications. In F. Eckman, D. Highland, P. Lee, J. Mileham, & R. Weber (Eds.), Second language acquisition theory and pedagogy (pp. 187-202). NJ: Lawrence Erlbaum Associates.
- Krashen, S. D. (2004). Free voluntary reading: New research, applications, and controversies. Proceedings of the Fifth Pan-Asian Conference on Language Teaching at FEELTA2004, Vladivostok, June 24-27. 2004, 16-19.

- Kumar, R. (1999). Research methodology: a step-by-step guide for beginners. Malaysia: SAGE.
- Kyongho, H., & Nation, P. (1989). Reducing the vocabulary load and encouraging vocabulary learning through newspapers. Reading in a Foreign Language, 6, 323-335.
- Lado, R. (1964). Language teaching: A science approach. USA: McGraw-Hill, Inc.
- Lai, F. (1993). The effect of a summer reading course on reading and writing skills. System, 21 (1), 87-100.
- Lange, D. L., & Clausing, G. (1981). An examination of two methods of generating and scoring CLOZE tests with students of German on three levels. The Modern language Journal, 65(3), 254-261.
- Langer, I., Thun, F. S., & Tausch, R. (1974). Verslandichkeit in Schule, Verwaltung, Politik and Wissenschaft. Munchen: Reinhardt.
- Lao, C. Y., & Krashen, S. (2000). The impact of popular literature study on literacy development in EFL: More evidence for the power of reading, System, 28, 261-270.
- Laroche, J. M. (1979). Readability measurement for foreign language materials. System, 7, 131-135.
- Lee, J. F. (1986). On the use of the recall task to measure L2 reading comprehension. The Modern Language Journal, 72, 173-187.
- Lee, J. F., & Ballman, T.L. (1987). Learners' ability to recall and rate important ideas of an expository text. In B., VanPatten, B., T. R. Dvorack, J. F. Lee (Eds.), Foreign Language Learning: A research perspective (pp. 108-117). Rowley, MA: Newbury House.

- Lee, J. F., & Riley, G. L. (1990). The effect of prereading, rhetorically-oriented frameworks on the recall of two structurally different expository texts. Studies in Second Language Acquisition, 11, 25-41.
- Leung, C. Y. (2002). Extensive reading and language learning: a diary study of a beginning learner of Japanese. Reading in a Foreign Language, 14(1), 66-81.
- Lituanas, P. M., Jacobs, G. M., & Renandya, W.A. (1999). A study of extensive reading with remedial reading students. In Y. M. Cheah & S.M. Ng (Eds.) Language instruction issues in Asian classrooms (89-104). Newark, DE: International Development in Asia Committee, International Reading Association.
- Lynch, B.K. (2003). Language assessment and programme evaluation. Edinburgh: Edinburgh University Press.
- Mackey, A., & Gass, S. (2005). Second language research: methodology and design. USA: Lawrence Erlbaum Associates.
- Mason, B. N. (2003). A study of extensive reading and the development of grammatical accuracy by Japanese university students learning English. Unpublished doctoral dissertation, Temple University, Osaka, Japan.
- Mason, B. N., & Krashen, S. D. (1997). Extensive reading in English as a foreign Language. System, 25(1), 91-102.
- Maxim, H. H. (2002) A study into the feasibility and effects of reading extended authentic discourse in the beginning German language classroom. The Modern Language Journal, 86(1), 20-35.
- McDonough, K., & Chaikitmongkol, W. (2007). Teachers' and learners' reactions to a task-based EFL course in Thailand, TESOL Quarterly, 41(1), 107-132.

- Meyer, B. J. F. (1985). Prose analysis: Purposes, procedures, and problems. In K. Britton & J. B. Black (Eds.), Understanding expository text: A theoretical and practical handbook for analyzing explanatory text (pp. 11-52). Hillsdale, NJ: Lawrence Erlbaum.
- Mikulecky, B. S. (1990). A short course in teaching reading skills. Reading, MA: Addison-Wesley.
- Mikulecky, B.S., & Jeffries, L., 2005. Reading power. NY: Pearson Education.
- Ministry of Education. (1978 -2009). Central university admissions system (CUAS). Thailand.
- Moore, A. (1943). Extensive reading versus intensive reading in the study of modern foreign language. The Modern Language Journal, 27(1), 3-12.  
Available: <http://www.jstor.org>
- Mueller, T.H. & Miller, R.I. (1970). A study of student attitudes and motivation in a Collegiate French course using programmed language instruction, International Review of Applied Linguistics, 8(4), 291-299.
- Munby, J. (1978). Communication syllabus design. Cambridge: Cambridge University Press.
- Nation, P. (1990). Teaching and learning vocabulary. New York: Newbury House.
- Nation, P. (1997). The language learning benefits of extensive reading. The Language Teacher, 21(5), 13-16.
- Nation, P. (1999). Learning vocabulary in another language. English Language Institute Occasional Publication 19. New Zealand: Victoria University of Wellington.
- Norusis, M. J. (2002). SPSS 11.0 guide to data analysis. New Jersey: Prentice Hall, Inc.

- Nuttall, C. 1982. Teaching reading skills in a foreign language. London: Heinemann.
- Nuttall, C. 1985. Teaching reading skills in a foreign language. London: Heinemann.
- Nuttall, C. (1996). Teaching reading skills in a foreign language (2<sup>nd</sup> ed.). Oxford: Heinemann English Language Teaching.
- Nuttall, C. (2005). Teaching reading skills in a foreign language. Oxford: Macmillan Education.
- Nuttall, D. (1987). The validity of assessments. European Journal of Psychology of Education, II, 109-118.
- Outhwaite, W. (1975). Understanding social life: the method called Verstehen. London: George Allen & Unwin.
- Pallant, J. (2006). SPSS survival manual (2<sup>nd</sup> ed.). Glasgow: Open University Press.
- Pallant, J. (2007). SPSS survival manual. Singapore: Open University House.
- Palmer, H. (1964). The principles of language study. Oxford: Oxford University Press. (Original work published in 1921.)
- Palmer, H. (1968). The scientific study and teaching of languages. Oxford: Oxford University Press. (Original work published in 1917.)
- Paribakht, T.S. & Wesche, M. (1997). Vocabulary enhancement activities and reading for meaning in second language vocabulary. In J. Coady & T. Huckin (Eds.), Second Language Vocabulary Acquisition (pp. 174-200). New York: Cambridge University Press.
- Perfetti, C. (1990). The cooperative language processes: semantic influences in an autonomous syntax. In D. Balota, G. Flores d'Arcais & K. Rayner (Eds.), Comprehension processes in reading (pp. 205-230). Hillsdale, NJ: Lawrence Erlbaum.

- Pigada, M., & Schmitt, N. (2006). Vocabulary acquisition from extensive reading: A case study. Reading in a Foreign Language, 18(1), 1-18.
- Pilgreen, J., & Krashen, S. D. (1994). Sustained silent reading with English as a second language high school students: Impact on reading comprehension, reading fluency, and reading enjoyment. School Library Media Quarterly, 22, 21-23.
- Pitts, M., White, H., & Krashen, S. D. (1989). Acquiring second language vocabulary through reading: A replication of the Clockwork Orange study using second language acquirers. Reading in a Foreign Language, 5(2), 271-275.
- Plass, J., Chun, D., Mayer, R., & Leutner, D. (1998). Supporting visual and verbal learning preferences in a second-language multimedia learning environment. Journal of Educational Psychology, 90(1), 25-36.
- Polak, J., & Krashen S. D. (1988). Do we need to teach spelling? The relationship between spelling and vocabulary reading among community college ESL students. TESOL Quarterly, 22(1), 141-146.
- Polit, D. F. (1996). Data analysis & statistics for nursing research. New York: Humanalysis, Inc.
- Pritchard, R. (1990). The effects of cultural schemata on reading processing strategies. Reading Research Quarterly, 25, 273-295.
- Prowse, P 1999. Teacher's guide Cambridge English Readers. Cambridge: Cambridge University Press.
- Rayner, K., & Pollatsek, A. (1989). The psychology of reading. Eaglewood Cliffs, NJ: Prentice Hall.

- Rattanaich, S. (1987). The effects of using top-level structure instructional modules and traditional teaching method in teaching English to Thai students. Project report SEAMEO: RELC Fellowship Grant.
- Reading survey shows Thai prefer listening and watching TV than reading. (2010, February 10). The Nation, p. 7.
- Richards, J. C., Hull, J., & Proctor, S. (2005). Interchange 2 (3<sup>rd</sup> ed.). Hong Kong: Cambridge University Press.
- Richards, J. C., & Schmidt, R. (2002). Longman Dictionary of language teaching and applied linguistics (3<sup>rd</sup> ed.). London: Pearson Education.
- Richards, J. C., Schmidt, R., Platt, H., & Schmidt, M. (2002). Longman dictionary of language and applied linguistics. Malaysia: Longman.
- Richards, J. C., & Rodgers, T. S. (1986). Approaches and methods in language teaching. Cambridge: Cambridge University Press.
- Richards, K. (2003). Qualitative inquiry in TESOL. Great Britain: Palgrave Macmillan.
- Riley, G. L., & Lee, J. F. (1996). A comparison of recall and summary protocols as measures of second language reading comprehension. Language Testing, 13(2), 173-190.
- Rivers, W.M. (1968). Teaching foreign language-skills. Chicago: University of Chicago Press.
- Rivas, R. M. M. (1999). Reading in recent ELT coursebooks. ELT Journal, 53, 12-21.
- Robb, T., & Susser, B. (1989). Extensive Reading vs Skills Building in an EFL Context. Reading in a Foreign Language [On-line], 5(2), 240-241.  
Available: <http://www.NetLibrary.com>



- Rosenthal, R., Rosnow, R. L., & Rubin, D. B. (2000). Contrasts and effect sizes in behavioural research: A correlation approach. Cambridge: Cambridge University Press.
- Rossmann, G. B., & Wilson, B. L. (1985). Numbers and words: combining quantitative and qualitative methods in a single large-scale evaluation study. Evaluation Review, 9(5), 627-643.
- Rowena, M. (2002). How to write a thesis. Buckingham: Open University Press.
- Rumelhart, D. D. (1980). Schemata: The building blocks of cognition. In R. J. Spiro, B. C. Bruce, & W. F. Brewer (Eds.), Theoretical issues in reading comprehension (pp. 123-156). Hillsdale, NJ: Erlbaum.
- Rumelhart, D. D., & Ortony, A. (1977). The representation of knowledge in Memory. In R. C. Anderson, R. J. Spiro & W. E. Montague (Eds.), Schooling and the acquisition of knowledge. Hillsdale, NJ: Erlbaum.
- Salkind, N. J. (2010). Statistics for people who think they hate statistics. USA: SAGE Publications Inc.
- Samuels, S. J., & Kamil, M. L. (1984). Models of the reading process. In P. D. Pearson (Ed.), Handbook of reading research (pp. 185-224). New York: Longman.
- Sapsford R., & Jupp V. (2006). Data collection and analysis. London: SAGE.
- Schleppegrell, M. (1984). Using input methods to improve writing skills. System, 12, 287-292.
- Schraw, G. Bruning, R., & Svoboda, C. (1995). Sources of situational interest. Journal of Reading Behavior, 27(1), 1-17.

- Schulz, R. (1981). Input, intake and retention: Effects of increased processing on incidental learning of foreign language vocabulary. The Modern Language Journal, 65, 43-53.
- Schwandt, T. A. (2000). Three epistemological stances for qualitative inquiry. In N. K. Danzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (2<sup>nd</sup> ed.), (pp. 189-213). CA: Thousand Oaks, Sage.
- Seaman, H. C., & Verhonick, P. J. (1982). Research methods for undergraduates students in nursing (2<sup>nd</sup> ed.). USA: Prentice-Hall, Inc.
- Selinger, H., & Shoamy, E. (1990). Second language research methods. Hong Kong: Oxford University Press.
- Shanahan, T., Kamil, M. L., & Tobin, A. W. (1982). Cloze as a measure of intersentential comprehension. Reading Research Quarterly, 17(2), 229-255.
- Sheu, S.P.H. (2003). Extensive reading with EFL learners at beginning level. TESL Reporter, 36(2), 8-26.
- Shohamy, E. (1984). Does the testing method make a difference? The case reading comprehension. Language Testing, 1(2), 147-170.
- Shohamy, E., & Inbar, O. (1991). Validation of listening comprehension tests: The effect of text and question-type. Language Testing, 8, 23-40.
- Silberstein, S. (1994). Techniques and resources in teaching reading. China: Oxford University Press.
- Simensen, A. M. (1987). Adapted readers: How are they adapted? Reading in a Foreign Language, 18(2), 1-27.

- Sims, J. M. (1996). A comparative study improvements in reading comprehension of skill-based instruction and extensive reading for pleasure with Taiwanese freshman university students. Unpublished doctoral dissertation. The Florida State University, USA. Available: <http://proquest.umi.com/pqdweb>
- Siramard, Y. (1992). An investigation on the opinions of English teachers in region six in the academic year 1988 concerning in organizing of co-curricular English activities. Unpublished master's thesis, Mahidol Univeristy, Thailand.
- Smith, F. (1971). Understanding reading. New York: Holt, Reinhart & Winston.
- Smith, F. (1982). Understanding reading. (3<sup>rd</sup> ed.). New York: Holt, Reinhart & Winston.
- Smith, F. (1994). Understanding reading: a psycholinguistic analysis of reading and learning 5<sup>th</sup> ed.). NJ: Erlbaum.
- Snow, C. E. (2002). Reading for understanding: Toward a research and development program in reading comprehension. Pittsburgh, PA: RAND.
- SPSS Incorporation. (2008). SPSS for Windows (Version 17.0) [Computer software]. Chicago, IL: SPSS Incorporated. .
- Stanovich, K. E. (1980). Toward an interactive compensatory model of individual differences in the development of reading fluency. Reading Research Quarterly, 16(1), 32-71.
- Steffensen, M., & Joag-Dev, C. (1984). Cultural knowledge and reading. In C. Alderson & A. Urquhart (Eds.), Reading in a foreign language (pp. 48-61). New York: Longman.
- Students achieve low grades in ONet exams. (2010, April 2). The Nation [Online]. Available: [www.nationmultimedia.com](http://www.nationmultimedia.com)

- Sun, Y. C. (2003). Extensive reading online: An overview and evaluation. Journal of Computer Assisted Learning, 19, 438-446.
- Susser, B., & Robb, T. (1990) EFL extensive reading instruction: Research and procedure. JALT Journal, 12(2), 161-185.
- Swaffar, J. (1988). Readers, texts, and second language: The interactive processes. The Modern Language Journal, 72, 123-149.
- Taguchi, E., Takayasu-Maass, M., & Gorsuch, G. (2004). Developing reading fluency in EFL: How assisted repeated reading and extensive reading affect fluency development. Reading in a Foreign Language [On-line], 16(2), 70-96. Available: <http://www.NetLibrary.com>
- Takase, A. (2003). The effects of extensive reading on the motivation of Japanese high school students. Unpublished doctoral dissertation, Temple University, Osaka, Japan.
- Tamrackitkun, K. (1995). The effects on achievement of M.3 students of using top-level structure and cloze procedure exercises in teaching English reading. Unpublished master's thesis, Mahidol University, Thailand.
- Taylor, W. L. (1953). Cloze procedure: A new tool for measuring readability. Journalism Quarterly, 30, 415-453.
- Thai National Statistical Office (2009). A report on the reading behavior of population survey 2008. Bangkok: Government Printing Office.
- The University of Salford. (September 2009). Code of practice for the conduct of postgraduate research degree programmes. Manchester: The University of Salford.
- Thorndike, E. L. (1917). Reading as reasoning: a study of mistakes in paragraph reading. Journal of Educational Psychology, 8(6), 323-332.

- Tobias, S. (1995). Interest and metacognitive word knowledge. Journal of Educational psychology, 87(3), 399-405.
- Tran, A. (2006). Modified extensive reading for English language learners. Reading Improvement, 43(4), 173-178.
- Tsang, W. (1996). Comparing the effects of reading and writing on writing Performance. Applied Linguistics, 17(2), 210-223.
- Tudor, I., & Hafiz, F.M. (1989). From input to intake; the effect of simplified readers on ESL development. Journal of Reading, 12(2), 688-693.
- Underwood, G., & Batt, V. (1996). Reading and understanding. Cambridge, MA: Blackwell.
- Urquhart, S., & Weir, C. (1998). Reading in a second language: Process, product and practice. New York: Longman.
- Walsh, A. (1990). Statistics for social sciences. New York: Harper & Row.
- Waring, R. (2000). Extensive reading in second languages: A critique of the research. Available: <http://www1.harenet.ne.jp/~waring/papers/assesser>
- Waring, R., & Takaki, M. (2003). At what rate do learners learn and retain new vocabulary from reading a graded readers? Reading in a Foreign Language, 15, 130-163.
- Weir, C. (1990). Communicative language testing. London: Prentice Hall International (UK) Ltd.
- Weir, C. J. (1993). Understanding and developing language tests. London: Prentice Hall International (UK) Ltd.
- Weir, C. (1997). The testing of reading in a second language. In C. Clapman, & D. Corson (Eds.), Encyclopedia of language and education. Netherlands: Kluwer Academic Publishers.

- West, M. (1936). The new method readers for teaching English reading to foreign children: Reader IV. London: Longmans, Green.
- Wolf, D. (1993). A comparison of assessment tasks used to measure FL reading comprehension. The Modern Language Journal, 77, 473-489.
- William, E., & Moran, C. (1989). Reading in a foreign language at intermediate and advanced levels with particular reference to English. Language Teaching, 22(4), 217-228.
- William, R. (1986). Top ten principles for teaching reading. ELT Journal, 40(1), 42-45.
- Wilson, P., & Anderson, R. C. (1986). What they don't know will hurt them: The role of prior knowledge in comprehension. In J. Orasanu (Ed.), Reading comprehension: from research to practice (pp. 31-48). Hillsdale, NJ: Lawrence Erlbaum.
- Winograd, T. (1977). A framework for understanding discourse. In M. A. Carpenter (Ed.), Cognitive processes in comprehension (pp. 63-88). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Wodinsky, M., & Nation, P. (1998). Learning from graded readers. Reading in a Foreign Language. 1(2), 81-92.
- Wongsotorn, A., Sukamolsun, S., Chinthammit, P., Rattanathayanonth, P. & Noparumpa, P. (1996). National Profiles of Language Education: Thailand. PASAA, 26(1), 89-103. Bangkok.
- Yamashita, J. (2008). Extensive reading and development of different aspects of L2 proficiency. System, 36, 661-672.
- Yamazaki, A. (1996). Vocabulary acquisition through extensive reading. Dissertation Abstracts International, 57, 1079-A.

- Yano, Y., Long, M. H., & Ross, S. (1994). The effects of simplified and elaborated texts on foreign language reading comprehension. Language Learning, 44(2), 1994, June.
- Zhang, R. (2004). Using the principles of exploratory practice to guide group work in an extensive reading class in China. Language Teaching Research, 8(3), 331-345.
- Zoreda, M. L., & Vivaldo-Lima, J. (2008). Scaffolding linguistic and intercultural goals in EFL with simplified novels and their film adaptations, English Teaching Forum [On-line], 22-28. Available: <http://exchanges.state.gov/englishteaching/forum>