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English reading comprehension of Thai undergraduates : L1/L2 usage, texts, strategies and problems

Rapeeporn Sroinam
Edith Cowan University

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**English Reading Comprehension
of Thai Undergraduates:
L1/L2 Usage, Texts, Strategies and Problems**

Rapeeporn Sroinam

2005

Doctor of Philosophy

USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

ABSTRACT

English language has been taught as a foreign language in Thailand for more than a century and now occupies an important place at all levels of the Thai education system.

This study investigates the influence that the Thai language has on intermediate level undergraduate students while they are engaged in individual unaided reading of a variety of English texts and determines what aspects of reading texts caused problems. It aims to compare how often and for what purposes students resort to Thai with texts about culturally familiar texts and culturally unfamiliar texts, as well as with different genres and question types. The subjects are 20 second year teacher trainee students majoring in English at Udon Thani Rajabhat University.

Student responses to the texts, retrospective interviews, and a questionnaire were used as quantitative and qualitative data. For quantitative data, the SPSS program was used to analyse the frequency of using the first language, the relationship between scores, texts and question types, as well as that between strategies, scores, question types and problems. The use of content analysis with qualitative data from responses to tasks and the interviews produced the means whereby student strategies and problems could be categorised and findings in the qualitative data extended.

Students showed strong similarities in regard to what they do when reading. Thai rather than English was the language of thought across all groups, across all genres, text types and question types. Texts and text preferences had a small effect on scores, with results being significantly higher for two of the culturally familiar texts and for the narrative ahead of the transactional and editorial genres. When reading, students used their first language with all genres, text and question types to operate a similar range of strategies for assisting decoding with scores revealing a moderate degree of assistance from such usage. No difference was discerned in the type of strategies used by high, medium and low achievers, and all groupings showed a bias towards the use of bottom-up strategies with top-down as well as bottom-up questions. Besides poor answering techniques, the major problems discerned were those with word meanings, figurative language, reference and tense.

These findings about what these EFL students thought and did while reading have important implications for the understanding of second language reading. The explanation of how differences in scores occur despite the evidence of similar approaches can emerge from more specific work on how the many variables involved in the process interact with one another.

Declaration

"I certify that this thesis does not, to the best of my knowledge and belief:

- (i) incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education;*
- (ii) contain any material previously published or written by another person except where due reference is made in the text;*
- (iii) contain any defamatory material."*

Signature.

Date..... 9 August 2005.....

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Abbreviations

There are some abbreviations used in this study. Therefore, these abbreviations are written in this section in order to easily understand this study. These abbreviations are as follows.

- EFL : English as a foreign language
- ESL : English as a second language
- SLA : Second language acquisition
- ELT : English language teaching
- CLT : Communicative language teaching
- LAD : Language Acquisition Device
- L1 : The first language or the mother tongue
- L2 : The second language or the foreign language
- S : Strategy of using Thai to assist English reading comprehension
- P : Problem from reading English texts

CHAPTER ONE

INTRODUCTION

In the twenty-first century, the English language is used as an international language around the world, and although other world languages exist, English is still the most important one. Thus, the macro skills of English, listening, speaking, reading and writing as well as other courses in relation to English are provided by Thai schools, universities and other educational institutions to help the Thai people use and understand English. However, reading is still a major problem with most students, especially those in higher education. Thus, factors such as the use of the first language and the reading problems which arise while students are reading English need to be thoroughly understood. The aim of this study is therefore to better understand what English major undergraduate students do when they read English.

In this first chapter, information about Thai education, Udon Thani Rajabhat University and its English courses, the teaching and learning of a second/foreign language, English language teaching as well as English reading comprehension in Thailand is presented. In addition, the purposes of the study and its significance are also discussed.

1.1 Thai education

Education in Thailand, responding to the need to enhance people's ability to cope with the rapid changes associated with globalisation, has gone through a period of change since 1997. This is also in response to the economic crisis in Thailand and neighbouring countries. The current education system in Thailand is based on the 1997 Constitution and the 1999 National Education Act, the latter of which was revised in 2002.

The education system is classified into three types: formal education, non-formal education and informal education. Formal education consists of basic education which provides pre-primary, primary, lower secondary, upper secondary education, and higher education which includes universities, institutes and colleges education. Formal education also covers both special needs and welfare education, and vocational education. Non-formal education is provided by both public and private agencies and

institutions outside the school system. It covers pre-school, education for literacy, general non-formal education such as short courses in vocational training and interest group programmes, and quality of life improvement activities. Informal education, concerned with individual interests, enables learners to learn by themselves. It is provided by libraries, museums, science and technology centers, and through several kinds of mass media such as radio, television, newspaper, and magazines ("National Report," 2004).

English is the main foreign language taught for formal education as well as some programmes of non-formal and informal education in Thailand. For tertiary level, English has been taught as compulsory courses and elective courses for all students in universities, institutes and colleges. Moreover, the Rajabhat universities and other universities also provide English courses for students majoring in English to serve the community and country needs.

1.2. Udon Thani Rajabhat University and English courses

Udon Thani Rajabhat University, located in the northeast of Thailand, is one of 41 Rajabhat Universities in Thailand. His Majesty King Bhumibhol of Thailand conferred the name "Rajabhat University" on 41 Rajabhat Institutes all over Thailand on 10 June 2004 ("The 2004 Rajabhat Universities Act," 2004). Udon Thani Rajabhat University has responsibilities as follows:

1. To provide academic courses for both undergraduate and postgraduate education in five faculties; Faculty of Education, Faculty of Humanities and Social Sciences, Faculty of Sciences, Faculty of Technologies, and Faculty of Management Sciences.
2. To conduct research operations for expanding education and community development in the provinces of Udon Thani, Nongkhai, and Nong Bua Lamphu.
3. To transfer technology for developing the areas and to conserve local arts and culture.
4. To serve communities and the neighbouring country, Laos, in academic activities such as seminar and training courses.

Udon Thani Rajabhat University provides several English courses for students majoring in three English programmes (General English Programme, English Teacher Training Programme and Business English Programme) as well as English Foundation courses for

all students. English teacher trainees have to study several English courses, for example, listening and speaking, reading, writing, form and usage, drama and literature in order to be English teachers after graduating. Although these students have been exposed to English for a long time, they still have problems in every macro-skill, especially reading skills. They cannot interpret, analyse, summarise and paraphrase readings such as English text books, newspaper articles, and advertisements. This problem was indicated by the English proficiency tests in reading English texts for 145 students majoring in English programmes in the year 2003. The mean score for the mid-term test of *Reading for text interpretation* was 53.22% and for the final test it was 69.43%. These scores do not reach the necessary criteria of 70%, for the students majoring in English at Udon Thani Rajabhat University (Sroinam, 2003).

There are many reasons for this problem. One of the most important reasons suggested is the transfer of the Thai language. The main consequences of this for the development of second language reading problems are the differences between the two systems in such areas as idioms and figurative language, grammatical structure and cultural background. Even though the transfer from the Thai language can be an obstacle for acquiring reading skills, it can also be an aid to English language learning. For example, areas of similarities between the two languages such as in coordination and basic structures, that is, subject + verb + object can help students understand English texts. In addition, student background knowledge concerned with Thailand can assist the understanding of students in reading culturally familiar texts. Therefore, in this research the issue of to what extent and how transfer from the first language (L1) is used in reading second language (L2) texts together with problems arising when reading will be examined in relation to the development of reading skills.

1.3 Teaching and learning a second / foreign language

Although some schools and universities in Thailand provide bilingual English-Thai education, most of them still restrict English to courses as a foreign language. As a consequence the problem for these educational institutions is that student English proficiency is low.

1.3.1 English language teaching

Nowadays, English language teaching (ELT) is affected by globalisation. Global media and businesses expand all over the world and they can be relocalised to meet the needs of different parts of the world (Warschauer, 2000, 512-513). ELT is also an important business for globalisation. For example, Crystai (1997, 103) points out that over 400,000 people took English language examinations conducted by the British Council in 1995 and there were 120,000 students learning English and other skills using English in British Council teaching centres throughout the world.

Hence, linguists, theorists, language educators, language teachers and book publishers all strive to discuss and/or make available the best method to teach English. Over the last twenty years communicative language teaching (CLT) has been the popular approach to teach languages in the English speaking world and most language teachers adopt CLT for teaching or at the least some aspects of it. At the same time linguists, theorists and educators attempt to create syllabuses, incorporating its principles. It is believed that the theory of CLT can be used to support the use of classroom activities, which focus on learning language through communication, using authentic and meaningful communication for classroom activities, developing communicative fluency, integrating different language skills for communication, and learning through creative construction involving trial and error (Richards & Rodgers, 2001, 172). In addition, Johnson and Johnson (1998, 68-73) mention five core characteristics for CLT, that is, appropriateness of communicative situation, message focus for activities, psycholinguistics processing such as cognitive and other processes, risk taking by encouraging learners to guess and learn from errors, and engaging in free practice.

Although CLT reflects the views of modern linguists and researchers, it cannot be entirely appropriate for all ELT situations around the world (Burnaby & Sun, 1989; Coleman, 1996, 219-238; Li, 2001, 149-165). Thus, several new approaches have been designed to solve the problem of lack-of-fit between CLT and local conditions. A context approach is an important new approach which emphasises many aspects of the context such as students' attitudes and cultural expectations. In accordance to this approach, it is alleged that CLT neglects the context which is a necessary aspect of language pedagogy and that CLT is not suited in all its aspects to every situation. The context approach leads teachers and learners to consider the whole context and adapt the methodology and

materials to suit the situation. Bax (2003, 278-287), for example, claims that context analysis skills should be developed in order to discern varied learner needs, wants, styles and strategies, coursebooks, local conditions as well as the classroom, school and national cultures. The context approach may be able to establish a new option for teaching English in the Thai context by its insistence that local conditions must be taken into account when planning a course. It is the intention of this study to establish greater knowledge about what some aspects of those local conditions are, especially those relating to student reading processes.

1.3.2 English reading comprehension in Thailand

The English language in Thailand is taught in a context where English is a foreign language, because people in Thailand do not use English in their daily lives. As students have few opportunities to use English outside an English class, they have problems in using all the macro-skills in English. Studies in Thailand have indicated that Thai students experience considerable difficulty in reading comprehension in regard to many subskills such as finding the main idea and supporting detail, sequencing understanding, compare-contrast/cause-effect relationships, drawing conclusions, and predicting outcomes, as well as the skills of inferring and understanding of connectives used in texts (Sopprasong, 1989, 3-4; Sutta, 1994, 2; Youngjermjantra, 1994, 2). In addition, Sretasathiern (2003, 3-4) found that students at a university level have problems with interpreting elliptical sentences when reading English science and technology textbooks. As a result, linguists, educators and teachers of English in Thailand have been attempting to find ways to remedy this deficiency, which is considered a key one in terms of career needs.

In relation to CLT, Stern (1993, 177-204) indicates that the communicative activities syllabus involves the use of communicative activities in the language classroom and also outside the classroom. Authentic communication will be an objective of learners in the classroom such as talking in English so that learners can later participate in real communication including activities outside the classroom such as class trips or exchange visits to another community. From these activities, learners of a second/foreign language can acquire the second/foreign language as if they are acquiring their first language by the regular use of English.

English language teachers in Udon Thani Rajabhat University have been adapting CLT principles in order to enhance the efficacy in the teaching of English to students. They have been trying to use interactive activities in teaching reading skills in a classroom and encouraging students to use authentic communication as well as authentic materials in a classroom and outside the classroom. However, students still do not come close to being able to read authentic texts inside or outside a classroom. Thus, students still have problems in reading comprehension and reading for text interpretation.

Therefore, there may be a case for reflecting upon the value of some of the CLT principles. For example, students are urged to think and talk in English as far as possible whereas the reality may be that this disregards their normal learning style. Aebersold & Field (1997, 21-33) hold a contrary view to CLT on this matter and instead promote the idea that the role of L1 in learning English should not be ignored. Hence, the role of the Thai language in reading comprehension will be examined in this study for finding the way for helping the comprehension of Thai students.

1.4 Purposes of the study

The purposes of the study are:

1. To investigate the use of Thai amongst year 2 undergraduate English majors when reading English texts and the reflections of the students on the use of Thai and reading comprehension.
2. To determine whether and to what extent students use Thai according to genre, text type and question type.
3. To determine with which genre and text type the students obtain better scores.
4. To determine whether a stated preference for text type has an effect on scores.
5. To investigate the reading processes used by the students by categorising the stated use of strategies and the types of problems experienced when reading.

1.5 The significance of the study

The problem of reading comprehension of Thai students is that students frequently cannot comprehend and acquire benefit from English texts. Misunderstandings often arise when students read English texts, newspaper articles or advertisements. There are many possible reasons for this problem and one of these relates to student use of their

mother tongue, Thai, whilst reading. Therefore, this study will examine the nature of language and content transfer, as well as other aspects of the reading process, in order to reach a greater understanding of how the first language is used and influences Thai undergraduate students whilst reading English texts. Increased knowledge of this particular English as a foreign language (EFL) group in Thailand can then feed into better understanding of the second language reading process and improved teaching and learning in such a context.

1.6 Intended outcomes

The intended outcomes are:

1. Identification of the extent and nature of the use of the Thai in English reading comprehension and the student reflection on the use of Thai and how Thai assists reading comprehension.
2. Evidence about whether the use of Thai varies in accordance with differences in genre, text type and question type as well as with which genre and text type the students obtain better scores.
3. Evidence about whether a stated preference for text type has an effect on scores.
4. Evidence about the use of strategies of using Thai in English reading comprehension as well as whether the use of Thai in implementing strategies is linked to the students' attainment of better scores.
5. Evidence about whether the use of formal schema or content schema is more prominent for students reading English texts.
6. Examination of linguistic areas where Thai students experience comprehension difficulties in reading English.

CHAPTER TWO

REVIEW OF LITERATURE

Four categories of research literature have been identified as being related to this research. Firstly, second language acquisition theory, which indicates how Thai and other students learn the skills necessary to read in a second language, is introduced. Secondly, culture-specific factors, which influence all language learners and most particularly adults as in this study, are examined. These include transfer of the first language, Thai, as well as the transfer of ideas. Thirdly, models of second language reading are discussed including reading comprehension processes and reading models. These models can help explain how readers comprehend written texts. Finally, research concerned with the study itself is treated.

2.1 General theories relating to second language acquisition

New theories about second language acquisition (SLA) have been developed in the last forty years. These theories attempt to describe how people learn and acquire a second language (L2) or languages other than their first language (L1) as well as what happens in the learner's mind when acquiring the L2.

The term second language acquisition (SLA) refers to both the subconscious and conscious processes by which the second or foreign language is learnt in natural or instructed situations (Ellis, 1985, 13). Nunan (1991, 1) also refers to the fact that SLA can occur in both tutored or untutored surroundings, and in second or foreign language settings. SLA is the result of many factors relating to both the learner and the learning situation (Ellis, 1985, 13). It is a complex process, involving elements which at this stage cannot be reliably delineated. In the case of this study, English is being acquired in tutored or untutored environments inside and outside the university. However, the former context involving teaching is the one with the stronger influence because rural Thai students have little contact with English beyond the classroom.

According to Krashen (1982, 21-30; 1985, 79-81; 1989, 8-10), learning is different from acquisition. It is a conscious process which focuses on tutored settings that

teachers prepare for the learners both inside and outside the classroom. The conscious process in learning is different from a subconscious process found in L1 acquisition which focuses on acquiring the L2 by natural and instructed settings inside and outside the classroom (Cook, 1993, 53-54; Larsen-Freeman & Long, 1991, 139-140). However, the L2 can also be acquired from learning, if students obtain suitable input in the L2, for instance, comprehensible texts for reading comprehension. If students receive more input, they will also acquire more of the L2, as shown in Krashen's work.

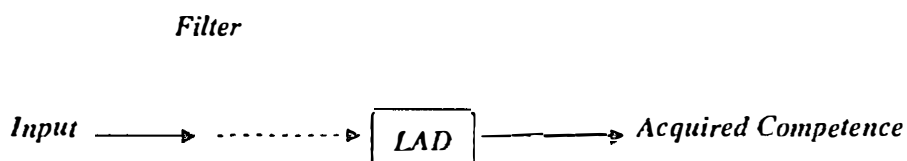
"Only comprehensible input is consistently effective in increasing proficiency, in other words, more comprehensible input results in more language acquisition and literacy development. More skill-building, more correction, and more output do not consistently result in more proficiency." (Krashen, 1994, 48)

In terms of Krashen's input hypothesis, learners can achieve their SLA by joining previous input, present competence and prior experience, with new input and trying to understand the meaning of combined input (Krashen, 1985, 3-4). This recent comprehension hypothesis which refers to subconscious acquisition resulting from understanding messages when people read or listen (Krashen, 2002, 395-404; 2004, 1-16) is linked to the input hypothesis. Krashen claims that students can acquire grammar from comprehensible input. Ellis (1997, 4-5) agrees that input in the second language is one of the primary external factors for SLA and language learning cannot occur without some input, for instance, the authentic language of written text or of native-speaker communication. From these hypotheses, Thai students can acquire L2 when they can connect their prior knowledge of English and experience to the print materials they read.

Nevertheless, input alone is insufficient for learning and opportunities for output are also necessary. According to Swain (1995, 125-126), output can assist SLA in three ways. Learners try to speak or write English utilising some feature of language that they lack in the target language, a process which results from and improves a consciousness-raising function. Second, learners can check their conscious thinking about the language by trying out a rule and seeing whether it leads to the successful use or negative feedback. Third, learners can examine their own output by identifying problems and discussing the means in which the second language can be used. As applied to the reading class in Thailand, this means that students need to be able to talk about the

readings and develop their own strategies for discovering ideas and dealing with any problems that arise.

An understanding of what is happening in the learner's mind while receiving input and producing output in the new language is difficult to obtain. Here Krashen's affective filter hypothesis is pertinent in relation to the conditions necessary to receive comprehensible input. He suggests that comprehensible input is inadequate for acquisition. The learner has to allow the input in and this will be concerned with ... affective filter which can work as a mental block to prevent the learner from understanding and completely utilising the comprehensible input, he/she obtains for SLA. When the learner is unmotivated, lacking in self-confidence, and anxious, his/her filter is up and prevents him/her from acquiring the new language. On the other hand, the affective filter can be down and allow the comprehensible input in when he/she has high motivation, self-confidence, and low anxiety (Krashen, 1982, 30-32; 1985, 3-4).



(Krashen, 1982, 32)

The diagram shows that input is the first variable in SLA and the affective filter can prevent or lead input to the Language Acquisition Device (LAD), which is the ordinary language learning ability or innate knowledge of language rules (Cook, 1993, 54). Sharwood Smith (1994, 18-19) and Crain & Lillo-Martin (1999, 4-6) point out that the LAD helps to direct learners in the language acquisition. It could be considered that along with L1 learners whose LAD assists in making sense of input from their parents, L2 students use their LAD to make sense of input and thus acquire language.

Therefore, by providing language input consisting of comprehensible texts such as culturally familiar texts related to Thai context, Thai teachers are setting up opportunities for students to activate their ability to form new understandings of the language by their search for meaning. Using culturally familiar texts can help students reduce their anxiety and increase their self-confidence as well as the motivation while

reading. The use of L1 in thinking process should not be forbidden when students read L2 texts. Thus the affective filter will be low enough for allowing the comprehensible input in and reaching the LAD. This process in turn leads to the comprehension of the English texts and ultimately to SLA.

Moreover, Allwright and Bailey (1991, 120-124) claim that negotiated interaction can stimulate language acquisition as well as comprehensible input. Therefore, teachers and learners should talk about the content of the reading text at the stage of pre-reading in order to connect the students' existing knowledge to the knowledge found in the text.

According to Ellis (1997, 4), the theories already mentioned help to describe the process of SLA but they do not fully explain it. Ellis points out that internal factors such as the learner's first language as well as his/her knowledge about the world are an essential complement to the referred external factors.

"No theory of L2 acquisition is complete without an account of L1 transfer." (Ellis, 1994, 341)

Krashen's comprehension hypothesis also predicts that L1 can assist comprehension when it is used to make input more comprehensible (Krashen, 2002, 395-404; 2004, 1-16). Therefore, the next section of this review deals more closely with the internal culture-specific influences which affect adult learners in Thailand learning a second language.

2.2 Second language acquisition, culture-specific influences

Understanding external factors alone will not lead to a solution to the problems in developing reading comprehension skills for Thai students. Important internal factors also influence the development of the English reading comprehension process for Thai students. An important area for consideration consists of culture-specific influences such as language transfer and transfer of ideas. In the case of this study, transfer from the Thai language and transfer of ideas will be explained in order to broaden the understanding of second language reading comprehension.

2.2.1 Language transfer

Language transfer is the influence of the L1 on SLA resulting from the similarities and differences between the two languages (Odlin, 1989, 37). This concept is used to explain the effects of the L1 on the L2 rather than the effects of the L2 on the L1 (Cook, 1992, 579; Gass, 1984, 115-131; Jarvis, 2000, 245-309; Jarvis & Odlin, 2000, 535-556; Kellerman, 1995, 125-150; Selinker & Lakshmanan, 1993, 197-216; Sharwood Smith & Kellerman, 1986, 1-9). Understanding of language transfer from the L1 to the L2 will help explain how the learners of L2 comprehend second language texts.

Language transfer analysis is different from contrastive analysis. While contrastive analysis compares the system of the L1 and the L2, transfer analysis investigates the way the learner's language (L1) influences the learner's use of the second/foreign language (L2). The similarities of L1 and L2 are more important than the differences because the learner tries to connect his/her new learning task to his/her existing knowledge from their L1 (*Encyclopedia of language and linguistics*, 1994, 740-742). Language transfer cannot be found only from L1 to L2 but also from L1 to L3 and L2 to L3 (DeAngelis & Selinker, 2001, 42-58; Dewaele, 1998, 471-490; 2001, 69-89; Ecke, 2001, 90-114; Fuller, 1999, 534-561; Hammarberg, 2001, 21-41; Herwig, 2001, 115-137).

Therefore, it is suggested in this study, the L1 can assist the L2 learner in reading comprehension, because L2 learners still have the knowledge of their L1, for instance, knowledge about vocabulary and grammatical structure, in their mind e.g. students in Thailand can make use of their understanding of

1. Structures such as Subject – Verb – Object which help learners to discern the same pattern in an English sentence
2. The way two basic words can be joined to form a compound word with a new meaning, for example, the Thai word for 'hospital' Roong + phayabaan = place + patient care, and the word for 'library' hong + samut = room + notebooks, books is common in Thai. Understanding of this in Thai is the basis of understanding compound words in English such as micro + phone = microphone and suit + case = suitcase.

Language transfer is an important factor in second language learning from both a positive and a negative aspect. It is assumed that where the first language and second/foreign language are similar, positive transfer occurs and is particularly obvious. However, where there are differences between the first language and the second/foreign language, the learner's first language knowledge may interfere with the acquisition of the second/foreign language. This is called negative transfer (Ellis, 1994, 302-303).

Both positive transfer and negative transfer can affect comprehension while reading in the L2. Ringbom (1987, 58) agrees that positive transfer will be an aid to second/foreign language learning and says it is more common in languages which share similar syntax and lexis (Ringbom, 1987, 92). He identifies cross-linguistic influence into two types, overt and covert. Overt cross-linguistic influence depends on perceived similarities between L1 and L2 and is divided into transfer and borrowing whereas covert cross-linguistic influence derives from lack of perceived similarities between L1 and L2. For overt cross-linguistic influence, transfer involves similarity of patterns of L1 and L2 and learners can use it to fill gaps of knowledge whereas borrowing involves similarity of forms of lexical item of L1 and L2 reflects lack of control to use the meaning of words in L1 wrongly to similar words in L2 (Ringbom, 1987, 50-52). He selects overt cross-linguistic influence, transfer, as being of greater importance in reading comprehension. According to him, language transfer occurs when the reader notices a similarity between what he is reading and the existing knowledge of L1 and makes use of the same to reach decisions about the meaning of the text. Ringbom (1992, 87) defines transfer in this instance as "the influence of L1-based elements and L1 based procedures in understanding and producing L2 text." The extent to which students make use of this L1 asset, is dependent on a number of factors as indicated below (Ringbom, 1987, 58-65).

1) *Stage of learning*; the role of the L1 in L2 learning is most important during the early stages of learning.

2) *Individual characteristics of the learners*; the extent of the transfer load will vary with the individual characteristics of the learner.

3) *Individual styles of learning*; some learners are extremely successful in learning L2 because they can connect the knowledge from the L1 to L2 learning.

4) *The learner's knowledge of other languages*; the L1 and other languages the learner knows may also be reflected in learner language.

5) *The learner's age and the mode of learning*; adults tend to make more use of the L1 than children.

6) *Type of utterance*; planned utterances may show more cross-linguistic influence than unplanned utterances and often translate from the L1 to the L2 where cross-linguistic influence is especially strong.

7) *Level of linguistic analysis*; cross-linguistic influence varies depending on both transfer load and the different linguistic levels being analysed.

Ringbom's typology of learner differences is an indication that the SLA process and the degree to which the first language is involved in the case of each learner vary, the amount of L1 transfer being dependent on age, stage and mode of learning, the learner's knowledge of L1 and other languages, and the individual characteristics of the learner. In terms of this group of Thai learners, several of Ringbom's indicators suggest that language transfer is likely to be important. The first reason is that L1 is most important in L2 learning during the early stages of learning. Therefore, it is assumed that language transfer is a strategy which Thai students will use from the beginning to the intermediate stages. Furthermore as the age of these students is between 19 and 21, like the adults mentioned in the fifth descriptor, these subjects may be influenced more by the Thai language than children learning a second language.

Several other writers in the field have pointed to the fact that transfer from the first language influences L2 learning in general and reading comprehension in particular. O'Malley, Chamot, Stewner-ManZanares, Kupper and Russo (1985, 33) indicate that the use of L1 is the basis for understanding and/or producing L2. Odlin (1989, 26) believes that positive transfer is a facilitating influence, based on similarities such as similar vocabulary between the first language and the second language. This is confirmed by Nation (1990, 262) who points out the similarity of vocabulary in L1 can lead a learner to guess a great number of words in L2. Hancin-Bhatt and Nagy (1994, 289-310) also agree that L2 learners transfer their L1 vocabulary knowledge to complete their L2 vocabulary tasks. Moreover, Faerch and Kasper (1986, 49-65) and Poulisse and Bongaerts (1994, 36-57) claim that L1 lexical items can be unintentionally transferred to L2 during early stages of L2 learning. In the case of the Thai language, as there is little similarity between English and Thai vocabulary, students are at some disadvantage in transferring such knowledge from actual words, although this may not apply to concepts.

However, language transfer alone cannot adequately explain how L1 has an effect upon L2 reading comprehension. There is a second internal factor which is important to the process of comprehension. This factor, the transfer of ideas, can also help to explain how L2 learners comprehend new information.

2.2.2 Transfer of knowledge

Another important culture-specific influence on second language reading is the transfer of knowledge or schema. Schema, or knowledge of the world and the language system, that is organised and stored in L1 in the reader's mind, can help him/her to comprehend and interpret texts easily.

Background or prior knowledge affects comprehension processes in all receptive situations including reading comprehension. Sequera (1995, 49) indicates that reading text involves interaction between the text and the reader's existing knowledge. The reader arranges and stores background knowledge, which is called schemata, in his/her mind and, as he/she reads, interprets new information with its help. Rumelhart (1980, 33-38) and Carrell & Eisterhold (1988, 73-92) point out that written texts do not have any meaning in themselves, but readers find and construct meaning with the assistance of their own previous knowledge. Schemata are chunks of knowledge in a reader's mind which are activated in the reader's effort to understand the world. They include the reader's knowledge about a topic, familiarity with both the text structure and content used in a text, and understanding of how to think about and discuss ideas drawn from the text. The reader uses this information to interpret the information received from sensory input such as reading, to determine goals, and to direct the information in the mind. Schemata consist of the reader's knowledge of objects, situations, events, actions and sequence of actions which readers can connect to new information and can vary according to the different individual's interpretation (Ryder & Graves, 1998, 17-20).

According to schema theory, schemata are divided into two types. Formal schema refers to background knowledge about the formal and rhetorical organisational structure of different types of texts, such as differences in genre. Content schema refers to background knowledge about the content area of texts (Carrell, 1983, 5-34). Understanding processes, involving the use of schemata during comprehension, can help to explain how Thai readers connect to their background knowledge and are involved

during comprehension in two processes, assimilation and accommodation (Conley, 1992, 55-59). The process by which the reader recognises and remembers some particular facts is assimilation, such as recalling the tradition of celebrating Thai New Year while reading a new text about Thai New Year in Australia, and then creating a broader view of the meaning of the meaning of Thai New Year celebrations. The process in which a schema is used to reconstruct and interpret information in text and in the reader's mind to form new concepts is accommodation; for example, using the background knowledge about celebrating Thai New Year to relate to new information about New Year celebrations elsewhere, and then creating a new interpretation of New Year celebrations. In addition, Conley mentions that teachers who understand the processes of assimilation and accommodation of schemata have more chance to help students learn to comprehend texts they read (Conley, 1992, 58).

In terms of the reading class, second language readers should be encouraged to relate their schemata to the new information they read. Steffensen & Joag-Dev (1984, 48-61) state that students should not translate every word for its individual meaning, but process it in chunks and guess or make predictions about what they are reading and relate to their schemata. Carrell and Eisterhold (1988, 73-92) point out that good readers can link their schemata with the new information they read in the text. Students can easily acquire new information if the new information matches their schemata because "comprehending a reading text can be easy if the new information matches the reader's available schema" (Conley, 1992, 58).

Before looking more closely at the actual reading process, it should be noted that Vivian Cook sees these theories relating to L1 influence as part of a whole system of the student retaining access to L1, whilst processing new input. According to Cook, this is "a usable access system for tapping both languages" (Cook, 1992, 571), which students use to carry out the two processes of code-breaking and decoding. Code-breaking is concerned with creating knowledge of the language in the mind. It is a process of acquiring the knowledge of an L2 by trying to understand the messages which lead to an understanding of L2 rules. Decoding is concerned with using prior knowledge or schemata or trying to understand or produce messages by using schemata. In this way "transfer is a source for both code-breaking and decoding" (Cook, 1992, 581). This explanation indicates that while reading L2 text, students engage in constructing

knowledge in their mind and then trying to link their background knowledge or schemata to the new knowledge.

In sections 2.2.1 and 2.2.2 the two important culture-specific influences of language transfer and schema theory have been discussed, although it could be said that the two language components, language transfer and formal schema, both refer to the structure of the language or how the language is organised to give meaning. This latter area could therefore be combined and as a result, the view is taken that for the purpose of this thesis the entire area can be called "formal schema", a term taken from schema theory.

2.3 Second language reading

Second language reading is a more complex process than first language reading because several additional factors are related to comprehension, including transfer of the first language or even other languages. Understanding of how learners become proficient in utilising language transfer for second language reading may help provide greater understanding of models of the second language reading process, such models for the most part deriving from first language reading comprehension research.

2.3.1 Models of the reading process

Reading is a cognitive process which involves a reader, a text, and the interaction between a reader and a text. There are three important models of the reading process which assist the understanding of how readers work to extract meaning from text: the bottom-up model, the top-down model and the interactive compensatory model.

Bottom-up model or text-based processing: This model of the reading process is concerned with the reader's focus on the smaller units of the text, especially on the words, phrases, and sentences in the text. It begins with the smallest unit and finishes with the largest unit of meaning. In this model a reader scans all the words in a phrase or a clause before constructing its meaning (Cohen, 1994a, 213-214; Dubin, Eskey, & Grabe, 1986, 11-13; Paran, 1997, 1-3). According to Carrell (1988, 101-103), bottom-up processing starts with decoding small linguistic units such as phonemes, graphemes and words, and constructing meaning from the smallest to the biggest units and then mixing schemata and present predictions according to the information in the text. It is also called

text-based or data-driven reading. Most Thai students in the early and intermediate stages tend to use bottom-up skills in reading by translating from English into Thai word by word (Chandavimol, 1998, 31-42). This method of processing helps to explain how it is the practice for Thai students to comprehend L2 texts by starting with the smallest unit of meaning in a sentence and then relating this to their schemata.

Top-down model or knowledge-based processing: This model of the reading process is concerned with approaching a text based on background knowledge, language, or textual schemata that the reader might connect to that particular text. Comprehension begins with the higher levels of processing, and proceeds to the use of the lower levels (Cohen, 1994a, 213-214; Dubin, Eskey & Grabe, 1986, 11-13; Paran, 1997, 1-3). This description of the reading process helps to explain how some L2 readers comprehend texts by starting with the higher levels and proceeding to the lower levels of processing. Top-down processing involves students in making the predictions about the text by using background knowledge or schemata of the reader to comprehend the L2 texts (Carrell, 1988, 101-103). Readers have to relate new or unexpected information from the text to their existing knowledge in order to understand the text (Aebersold & Field, 1997, 18). In addition, readers do not read every word in the text, but make predictions about the next group of words. Readers learn to guess the meaning of the words or phrases from their prediction in what is called the psycholinguistic approach to reading (Goodman, 1967, 126-135).

Interactive model and the compensatory assumption: This model suggests the interaction of bottom-up and top-down processes. Good readers utilise the two reading models of bottom-up processing or decoding of text, and top-down processing or application to the text and background knowledge of the readers. They construct meaning by using information from all sources of meaning including the two languages through the mixing of these two processes. The readers use texts as input and achieve meaning as output by interacting with the text (Boothe & Walter, 1999, 1-2). The interactive model of reading is thus very much concerned with the schemata of readers. It draws on schema theory in which the reader and text interact with the reader using his/her background knowledge and new knowledge from the text to achieve meaning (Grabe, 1991, 375-406). Interaction refers to the complex process whereby both bottom-up and top-down skills complement one another (Adams & Collins, 1979, 11-12; Anderson & Pearson,

1988, 37-55; Carrell, 1988, 101-102; Dubin, Eskey & Grabe 1986, 11-13; Rumelhart, 1977, 573-603; 1980, 33-58; Rumelhart & Ortony, 1977, 99-135).

In relation to interactive theory, Stanovich (1980, 33-71) points out that the interactive model is a process based on information, derived at the same time from several knowledge sources such as orthographic knowledge, lexical knowledge, syntactic knowledge, semantic knowledge, and schema. During this integrative process, the several component sub-skills of reading can support one another in a compensatory way. Some readers might rely on higher-level contextual or top-down factors to compensate for a deficit such as word recognition at a lower-level or bottom-up process. Alternatively, some readers with good bottom-up skills can use this ability to assist with any lack of content knowledge at the higher-level (Stanovich, 1980, 63). Moreover, Rumelhart (1977, 573-603; 1980, 33-58) claims that an interaction or a combination of bottom-up and top-down processing leads to the most efficient processing of texts. In addition, Spiro (1979, 118-122) suggests that successful readers regularly alter their model of processing based on the needs of particular text and situation, whereas unsuccessful readers tend to rely on only one model of reading.

These three models of the reading process can help to explain how readers construct meaning and how poor readers compensate for their deficits. In order to understand more about the actual operations of the process, aspects of reading processing within the models will be discussed.

2.3.2 Levels of reading processing

When readers read in their L2, they utilize the same process as when reading in their L1 but they have to perform different operations. Cohen (1990, 77-80) identifies the two major levels as recoding and decoding and explains these in the following way.

1. *Recoding level*; All readers are involved in recoding. They change written symbols into sounds. In L1 reading, it is unnecessary to read all letters in a word because L1 readers can identify the word from some letters in the word and good readers can make use of their predictive skills. On the other hand, L2 recoding at least in the early stages involves observing the letters in the word more carefully than in L1. Moreover, L2 readers might make an error

while recoding because of their inadequate knowledge of the orthography of the L2.

2. *Decoding level*; Decoding is concerned with acquiring meaning from words and phrases. There are four sub-levels at the decoding level; grammar, information, discourse, and writer's intent.
 - a) *The grammatical level*; Readers have to determine the importance of the grammatical categories of the words, phrases, and sentences in a text. They may identify words by their grammatical function such as nouns, verbs, adjectives, or adverbs. They may also analyse the syntactic role of sentences in the text. Skillful readers can automatically undertake the grammatical analysis of the text while early L2 readers have to make a great attempt to do it.
 - b) *Informational level*; Readers have to determine the basic information and concepts which are being conveyed in a text. Readers need to identify vocabulary as known, possibly known and unknown words in order to understand the information of the text. L2 readers might take much more time than L1 readers to do this.
 - c) *The discourse level*; Readers have to deal with cohesion which is the fit between parts of a text. Readers need to understand the grammatical and/or lexical relationships between the different elements of the text. They also have to deal with coherence which involves determining the relationship between ideas in the text.
 - d) *The writer's intent*; This refers to the attitude and tone of the writer. It may be easy to determine attitude and tone of the writer in an explicit and clearly written text. In some texts, this might be difficult to comprehend because some words are ironic or the writer is using figurative language which L2 readers have never seen. Therefore, L2 readers who lack knowledge or awareness of figurative language tend to ignore or misinterpret it.

These descriptions of the reading process, though not directly linked to the previous theories on culture-specific influences, nonetheless support the basic concept that readers need to utilise all their resources in a way that fits their particular strengths.

They therefore give greater credibility to the underlying thesis that readers should use their current linguistic and knowledge base for reading comprehension. Beyond that, they point to ways in which the reading tasks in the methodology for study should be planned to test the various decoding levels of Cohen which cover both top-down and bottom-up skills. Further explanation of this is found in chapter three (see section 3.3.1, reading comprehension tasks, pages 54-56).

2.3.3 Use of reading strategies

In relation to reading in second language, readers try to use their own reading strategies to assist their comprehension other than general reading strategies. In order to understand the strategies used to comprehend L2 reading texts, language learning strategies are considered.

Language learning strategies

Over the last twenty years researchers have been interested in studying about learning strategies. Nisbet and Shucksmith (1986, 6) state that the term 'strategies' is used to indicate a level above the term 'skills'. Strategies are different from skills because strategies have a purpose and efficient learners have developed a range of strategies which they can apply from their own style to accomplish the needs of a specific situation. Strategies also deal with learning for as Oxford (1990, 8) indicates 'learning strategies' are processes used by learners to facilitate the acquisition, storage, retrieval and use of information. Learners use strategies to help make the learning process easier and more successful. Oxford (1990, 9-10) and Williams & Burden (1997, 151-152) summarise twelve key features of language learning strategies which are useful for language learning:

- 1. contribute to the main goal of communicative competence by fostering grammatical competence, sociolinguistic competence, discourse competence, and strategic competence*
- 2. allow learners to become more self-directed or organise their own learning*
- 3. expand the role of teachers as parent, instructor, director, manager, judge, leader, evaluator, controller or doctor who can help the lack of knowledge of students*

4. *are problem oriented or are used in reaction to a problem*
5. *are specific actions taken by the learners in response to a problem such as guessing the meaning of a word*
6. *involve many aspects of the learner such as cognitive, affective and social aspects*
7. *support learning both directly and indirectly*
8. *are not always observable*
9. *are often conscious but sometimes learners use appropriate strategies automatically*
10. *can be taught or can improve their learning through training*
11. *are flexible*
12. *are influenced by a variety of factors.*

Learning strategies include two important kinds of strategies, cognitive and metacognitive strategies (Williams & Burden, 1997, 148-149). Cognitive strategies are mental processes used in learning or problem-solving. Metacognitive strategies involve knowledge about cognitive processes and the regulatory processes such as planning, prioritising, setting goals, self-management and evaluating their learning (Wenden & Rubin, 1987, 23-25). These learning strategies are categorised into the two classes of direct and indirect strategies, which are subdivided into six groups and 19 sets by Oxford, Lavine and Crookall (1989, 31-32) and Oxford (1990, 17) as follows:

Direct strategies

1. Memory Strategies

- A. Creating mental linkages
- B. Applying images and sounds
- C. Reviewing well
- D. Employing action

2. Cognitive Strategies

- A. Practicing
- B. Receiving and sending message
- C. Analysing and reasoning
- D. Creating structure for input and output

Indirect strategies

1. Metacognitive Strategies

- A. Centering your learning
- B. Arranging and planning your learning
- C. Evaluating your learning

2. Affective strategies

- A. Lowering your anxiety
- B. Encouraging yourself
- C. Taking your emotional temperature

3. Compensation strategies

- A. Guessing intelligently
- B. Overcoming limitations in speaking and writing

3. Social strategies

- A. Asking questions
- B. Cooperating with others
- C. Empathising with others

An alternative classification for learning strategies, which can be used by second language learners to facilitate the acquisition of the target language, has been provided by O'Malley, Chamot, Stewner-Manzanares, Russo, & Kupper (1985, 567-568), Chamot & Kupper (1989, 15-17) and O'Malley & Chamot (1990, 119-120).

Learning strategies

1. Cognitive strategies

1.1 Resourcing: Using second language reference sources such as dictionaries, encyclopedias, or textbooks.

1.2 Repetition: Repeating a language model such as a word or phrase.

1.3 Grouping: Ordering, classifying or labeling words, terminology, or concepts based on common attributes or meaning.

1.4 Deduction/induction: Applying self-developed rules to understand or produce the second language.

1.5 Imagery: Using mental or actual images to understand or remember new information.

1.6 Auditory representation: Representing in one's mind the sound of a word phrase or sentences.

1.7 Key word method: Remembering a new word in the second language by linking it to a word in the first language that sounds like or thinking about homonym in the first language.

1.8 Elaboration: Relating new information to previous knowledge, relating different parts of new information to each other, or making meaningful personal connection with the new information.

1.9 Transfer: Using previous linguistic knowledge or previous skills to facilitate comprehension or production.

1.10 Inferencing: Using available information to guess the meanings, predict outcomes, or fill in missing information.

1.11 Note-taking: Writing down key words or brief concepts while listening or reading.

1.12 Summarising: Making a mental, oral, or written summary of new information.

1.13 Recombination: Constructing meaningful larger language sequences by combining known elements in new ways.

1.14 Translation: Rending ideas from the first language to understand the second language.

2. *Metacognitive Strategies*

2.1 Planning

2.1.1 Advance organizers: Previewing the main ideas and concepts of the material to be learned.

2.1.2 Directed attention: Deciding beforehand to attend in general to a learning task and to ignore inappropriate distracters.

2.1.3 Functional planning: Planning for and rehearsing linguistic components necessary to carry out a forthcoming language task.

2.1.4 Selective attention: Deciding in advance to attend to specific aspects of language input.

2.1.5 Self-management: Understanding the conditions that help one successful in language tasks.

2.2 Self-monitoring: Checking one's comprehension of the input and checking the accuracy and appropriateness of the output.

2.3 Self-evaluation: Checking the outcomes of one's own performance against a standard after completing the tasks.

3. *Social and affective strategies*

3.1 Questioning: Asking for clarification, explanations, rephrasing, examples, or verification.

3.2 Cooperation: Working together in groups to solve a problem, pool information, check a learning task, model a language activity, or get feedback from performance.

3.3 Self-talk: Reducing anxiety to do the language task.

3.4 Self-reinforcement: Providing a reward for oneself after succeeding in a language learning task.

In relation to the two categories of learning strategies mentioned above, the former is concerned with learning in general for both L1 and L2, whereas the latter is related more closely to L2 learning. Although both lists are useful reference points for this study, the former is rather too broad. The former defines direct and indirect strategies, but this study is concerned basically with direct strategies and draws attention to cognitive and some compensatory strategies. For the latter, this study also refers to some of both the cognitive and metacognitive strategies. Both these well-known categories of learning strategies appear to cover a wide range of language learning situations and tasks including all four skills, whereas this study is concerned with the reading skill only. In this case too students are deprived of outside resources and personnel available in the classroom, for home study and the wider community and are having to depend upon themselves alone. Thus, it would be expected that any strategy list emerging would be rather narrower than these more general ones.

This study places the emphasis on a quite specific area, that is, on strategies of using the first language, the Thai language, to assist students to overcome their obstacles in reading L2 texts. The strategies will emerge from student reflections after reading English texts in accordance with Johnson & Ngor's claim (Johnson & Ngor, 1996, 123-140) that readers attempt to develop strategies in L2 reading because their L2 proficiency is inadequate for the L2 task. These strategies may not have developed or be utilised to the same degree in their L1 reading because readers do not require them to compensate for the lack of grammatical knowledge. In addition, Skehan (1998, 264) states that the strategies used by good language learners can be taught to poor readers so that they might become more effective learners. Therefore, if certain strategies are used by the good readers in the study they can be important strategies to guide other L2 readers.

Strategies used by the students and their connections with the preceding sets of learning strategies will be discussed in chapter 9. However, strategies of using the first language to facilitate L2 reading cannot help L2 readers in all cases because there are some problems concerned with differences between the first language and the second language. The next section will clarify contrastive analysis problems between the Thai language and the English language.

2.3.4 Contrastive analysis problems

The Thai language and the English language are different in almost all aspects; therefore, reading in English presents many difficulties for Thai readers. This section relating to contrastive analysis problems in vocabulary, morphology, the noun phrase, the verb phrase and sentence structure for Thai readers is included to provide a basis for later commentary on what common problems are encountered by the students in this study.

2.3.4.1 Vocabulary

English vocabulary deficit hinders L2 reader comprehension of the texts. Lekawatana, Littell, Palmer, Scovel and Spenser (1968-1969, 118-138) state that Thai learners experience problems in learning English vocabulary, especially with the meaning and the use of individual words. They categorise vocabulary problems for Thai learners into nine types as follows:

a) Words with no direct equivalent in Thai

Words with no direct equivalent in Thai such as greetings in English are used for specific times of a day (good morning, good afternoon) but there is one formal sentence for greeting in Thai, the use of grammatical words in English are used (I play the guitar. I play __ golf.) but there is no article "the" in Thai, the non-finite third person singular pronoun "one" has no correlate in Thai (One should respect her parents.) and Thai does not have these two word connectives – both...and, not only...but also, either...or, neither...nor.

b) Word pairs with only one-word Thai equivalent

Many pairs of English words exist for which there is only one word in Thai such as house-home, boat-ship, remember-recognise, prevent-protect, still-yet, and road-street-avenue cause problems for Thai learners.

c) Words or concepts with only partial Thai equivalents

Words with only partial Thai equivalents cause difficulty for the learners such as telling time (Time in English is divided into am and pm but it is divided into four six-hour sections in Thai), conjunction (English has more conjunctions than Thai) and negative words in English cause confusion for Thai learners (nobody, no one, never, nothing, nowhere and none).

d) Word groups commonly confused by Thai learners

Some pairs of words prevent Thai learners from comprehending texts such as most-almost, the other-another, whether-if-that, only-alone, each-every-all, and new-news.

e) Derivations

The form of words in English is confusing for Thai learners because there is no equivalent process in Thai such as interest-interesting, social-society, institute-institution, bored-boring, surprised-surprising and incorrect-impossible-illegal-irregular.

f) Homonyms

There are many words in English which have more than one meaning such as right, miss, dear, close, stand and just.

g) Prepositions

Prepositions cause many problems for Thai learners because the use of prepositions in English is more complicated than in Thai.

h) Idioms

Most idiomatic expressions in English cannot translate directly into Thai so Thai learners encounter difficulty with this aspect of English.

i) Words which have no direct equivalent in English

Thai learners often make mistaken comparison between the two languages where no word to express a certain concept exists.

2.3.4.2 Morphology

Thai has almost none of the morphological patterns as in English. Lekawatana, Littell, Palmer, Scovel and Spenser (1968-1969, 25-38) report that the major morphological patterns in English are concerned with three areas as follows:

a) Inflectional affixes consist of plural nouns, possessives, present tense and 3rd person singular, past tense and past participle, and comparative and superlative degrees.

b) Derivational forms consist of changing part of speech, changing in meaning, variation in "strong or irregular verbs" and variation in noun gender.

c) Some particular kinds of English words are troublesome for Thai learners of English such as case variation in pronouns (he, his and him) and variation in ordinal number (first, second, third, fourth and fifth).

2.3.4.3 Syntax: noun phrase

In both Thai and English, some words can be both a noun and a verb such as “comb” (in both English and Thai), “brush” (in both English and Thai). However, the noun phrase is located very differently in Thai. Lekawatana, Littell, Palmer, Scovel and Spenser (1968-1969, 87-117) compare the nominal forms in English and Thai as follows:

a) Names

In both English and Thai, there is a distinction between names, proper nouns and common nouns. Names in English are not usually modified by articles, demonstratives, genitives, adjectives, or relative clauses, but in Thai usually are. In English, names are always capitalised but there is no capitalisation in Thai. Besides, Thai people are generally introduced and known by their first names instead of their last names as in English.

b) Pronouns

There are some differences in the way person and number are indicated in the two languages such as I = /p^hǒm/ (male), /di^hǎn/ (female) and he & she = /k^hǎw/ (male & female). For the pronominal forms, Thai has more pronominal forms which indicate interpersonal relationships than English, such as those about age (/nǔ:/ for young girl in Thai) and social position (/p^hrǎʔoŋ/ for the king in Thai). On the other hand, English has more pronominal forms which indicate grammatical relationships than Thai, such as possessive adjectives (my, your, his, her, its, our, your and their in English whereas /k^hǎ:ŋ/+pronoun is used in Thai), possessive pronouns (mine, yours, his, hers, ours, yours and in English but noun+/k^hǎ:ŋ/+pronoun is used in Thai), indefinites (somebody, someone, everybody, everyone, nobody and anyone in English but /k^hon/ is used in Thai), objective pronouns (me, us, you, him, her, it and them but none in Thai) and reflexives (myself, ourselves, yourself, yourselves, himself, herself, itself and themselves in English but /ʔe:ŋ/ is used in Thai). Consequently, Thai learners usually have difficulties in learning these forms because pronouns in English are inflected in a way which is complex for Thai learners.

c) Countable and uncountable nouns

There is no distinction between countable and uncountable nouns in Thai. Therefore, Thai learners experience problems with articles, plural suffixes and modifiers for countable and uncountable nouns in English.

d) Determiners

There are three kinds of determiners in English that is articles, demonstratives and genitives whereas there are only two kinds of these in Thai that is demonstratives and genitives. Articles in English make it difficult to Thai learners because there are no articles in Thai. Definite, indefinite and no articles cause confusion frequently (Smyth, 2001). Thus, the mis-understanding or omission of articles creates difficulties for Thai learners. For the demonstratives, there are three demonstratives in Thai that is /nî:/ = this, /nân/ = that, and /nô:n/ = yonder whereas there are four of these in English that is this, these, that and those. The pre-articles, modifiers which are bound to articles, demonstratives and genitives such as many of, all of and half of, are another cause of error. Furthermore, some of the problems for Thai learners concern the usage of genitives in English such as my, your, their, John's, the King of Ireland's.

e) Relative pronouns

Since there are more relative pronouns in English than in Thai, Thai learners are usually confused with using them in English. Thai has three relative pronouns /tʰi:/, /sʰŋ/ and /pʰu:/ whereas English has more that is that, which, who, whom, and whose. Deletion of relative pronouns from relative clauses if the relative pronoun replaces the object of the subordinated clauses in English is another difference between English and Thai. Moreover, the use of appositive in English causes problems for Thai learners.

f) Nominalisation

There are more patterns of nominalisation in English than in Thai especially in texts with a high information content such as academic writing. Thai learners are usually challenged with a vast variety of nominalised forms in English which are used to signal differences in focus rather than in meaning.

g) Compounding

As compound nouns are common in Thai, Thai learners do not experience difficulty with these. However, some learners might have problems with the order of compound nouns

in English such as milk chocolate - chocolate milk, station bus - bus station and dog house – house dog.

h) Adjectives

There are many differences between adjectival modifications in English and Thai. In English, predicate adjectives must be linked to a noun phrase by a copular verb but the adjective simply follows the noun phrase without a linking verb in Thai. Adjectives in English are pronominal adjectives whereas they are postnominal adjectives in Thai. Both the ordering of adjectives and modifiers and the comparison of adjectives cause difficulty to Thai learners as well.

i) Intensifiers

There are more intensifiers in Thai than in English, therefore, Thai learners have less trouble with intensifiers than other grammatical units. For example, some intensifiers in Thai occur together with a certain adjectives such as /sǔ:ŋ yô:ŋ/ = extremely tall (/sǔ:ŋ/ means tall and /jô:ŋ/ is an intensifier for the adjective "tall") and /t̂ia málóktók/ (/t̂ia/ means short and /málóktók/ is an intensifier for the adjective "short").

j) Possessives

Possessive affixes are problems to speakers of Thai learning English because Thai learners tend to use "of" with animate nouns instead of using possessive affixes. Although some inanimate nouns use an "of" construction, Thai learners have problems with the exception in which the possessive is a measure of time or space in a possessive noun phrase such as *a year's leave* (a leave of a year), *an hour's drive* (a drive of an hour) and *a table's length* (the length of a table). When comparing these possessive noun phrases with compound nouns such as *a four year holiday* and *a 24 hour day*, the possessive marker of apostrophe "s" is used to modify head nouns of possessive noun phrases "year", "drive" and "length" (Kuiper & Allan, 1996)

k) Prepositions

There are more prepositions in English than in Thai, therefore, Thai speakers learning English usually make mistakes in this area. Prepositions in English signal many different kinds of case relationships and involve several grammatical units, nouns, verbs and adverbs. Besides, some prepositions are used differently in Thai and English such as at +

time, at/in + time, verb + to + place, arrive + at + place and leave + place in English. Additionally, Thai learners find it difficult to use since, for and during in English.

l) Numbers

Cardinal numbers usually cause confusion for Thai learners. They also encounter problems with the higher numbers in English because Thai uses a new word for every digit while English uses a new word for every digit up to one thousand and then repeats "ten" and "one hundred" as follows:

1	one /n ^h ŋ/
10	ten /s ^h ip/
100	hundred /r ^h ó:y/
1,000	thousand /p ^h an/
10,000	ten thousand /m ^h :n/
100,000	one hundred thousand /sæ:n/

The higher numbers also cause difficulties for Thai students as follows:

one million	1,000,000 (American & British English = 6 0's)
one billion	1,000,000,000 (American English = 9 0's) 1,000,000,000,000 (British English = 12 0's)
one trillion	1,000,000,000,000 (American English = 12 0's) 1,000,000,000,000,000,000 (British English = 18 0's)
one quadrillion	1,000,000,000,000,000 (American English = 15 0's) 1,000,000,000,000,000,000,000,000 (British English = 24 0's)

m) Classifiers

There are more classifiers in Thai than in English. Most countable and uncountable nouns for idiomatic usage of classifiers in English as piece, set and pair are classified by determiners such as a book /n^hǎŋs^h: n^hŋ l^hem/ and a piece of cake /k^hànom n^hŋ c^hin/.

n) Existentials

The use of the words "it" and "there" as introducing existential processes in English cause problems for Thai learners because there is no such usage in Thai. These words function as formal elements and have no meaning themselves, for example, "It's very cold tonight", and "There are many passengers on the bus".

2.3.4.4 Syntax: verb phrase

Differences in the verbal systems between English and Thai make it difficult for Thai learners. Brudhiprabha (1968, 38-41) and Lekawatana, Littell, Palmer, Scovel and Spenser (1968-1969, 61-86) point to the fact that Thai learners confront problems with tense, mood, aspect, modality, verbal complements, adverbs and prepositions, linking verbs and non-continuous verbs in learning English as follows:

a) Verb tenses, mood and aspect

A single Thai verb form can be used to express different English verb forms as follows:

- *verb – unmarked tense* in Thai can express *present, past, present perfect continuous* and *past perfect continuous* in English.
- */càʔ/ + verb – future tense* in Thai can express *future, present continual* and *past continual* in English.
- *verb + /lǎ:w/ or verb + /dǎ:y/ + /lǎ:w/ – perfective* in Thai can express *present perfect-completion*,
- *past perfect completion* in English, */kʰɔ:y/ + verb – habitual* in Thai can express *present perfect habitual* and *past perfect habitual* in English.
- */càʔ/ + verb + /dǎ:y/ + /lǎ:w/ or time* in Thai can express *future perfect* and *future perfect continuous* in English, */kamlay/ + verb – continuous* can express *present continuous* and *past continuous* in English,
- */càʔ/ + /kamlay/ + verb – future continuous* in Thai can express *future continuous* in English.

Thus, Thai learners of English are usually confused about verb forms in English.

b) Modals

The one Thai modal */cǎʔ/* is equivalent to many English modals, *will, would, shall* and *should* in English; therefore, there is not much problems for Thai learners with these. Modals *can, could, may* and *might* are not serious problems for the learners as well. However, difficulty may occur in connection with tenses because modals *would* and *could* are not always past tenses as the learners think. Moreover, modals *dare, need, ought to, had better* and *would rather* may cause difficulty for Thai learners of English.

c) Verbal complements

Verbal complements are different in English and Thai as follows:

- $V_1 + to + V_2$ ($V_1 + V_2$ in Thai)
For example, "I want to dance," in English
and "chǎn (I) tǎnka:n (want) ténram (dance)" in Thai.
- $V_1 + object + to + V_2$ ($V_1 + conjunction + clause$ in Thai)
For example, "I tell you to dance," in English
and "chǎn (I) bǎ:k (tell) hây (conjunction) k^hun (you) ténram (dance)" in Thai
- $V_1 + V_2, -ing$ ($V_1 + V_2$ or V_2, V_1 in Thai)
For example, "I start working," in English
and "chǎn (I) rǎ:m (start) t^hamṅa:n (work)" in Thai,
or "I finished working," in English
and "chǎn (I) t^hamṅa:n (work) sèt (finish)" in Thai,
or "I continued working," in English
and "chǎn (I) t^hamṅa:n (work) tǎ: (continue)" in Thai.
- $V_1 + to + V_2$ or $V_1 + V_2 + -ing$ ($V_1 + V_2$ in Thai)
For example, "I begin to read," or "I begin reading," in English
and "chǎn (I) rǎ:m (start) ?à:n nǎṅs^h: (read)" in Thai
- $V_1 + object + V_2$ past participle ($V_1 + clause$ in Thai)
For example, "I had my hair cut," in English
and "chǎn (I) hây (order) k^hǎw (she) tǎt (cut) p^hôm (hair) hâylá:w (already)" in Thai.
- $V_1 + object + V_2$ ($V_1 + conjunction + clause$ in Thai)
For example, "I made him clean his bedroom," in English
and "chǎn (I) banjká:b (force) hây (order) k^hǎw (he) t^hamk^hwa:msà?à:d (clean) hǎṅnǎ:n/ (bedroom)" in Thai.
- $V_1 + object + V_2 + -ing$ ($V_1 + object + continue + V_2$ in Thai)
For example, "I saw her dancing," in English

and “/c^hǎn (I) hĕn (see) k^hǎw (she) kamlaŋ (continue) tĕnram (d: ɾe)/
in Thai.

- V₁ + object + (to + V₂) + adv. (V₁ + conjunction + clause in Thai)
For Example, “I want you (to be) in the classroom,” in English
and “/c^hǎn (I) yà:k (want) hây (conjunction) k^hun (you) yù: (to be) nay
(in) hĕŋrian (classroom)/” in Thai.
- V₁ + object + (to + V₂) + noun (V₁ + conjunction + clause in Thai)
For example, “I considered her (to be) the principal,” in English
and “/c^hǎn (I) k^hǎwcaŋ (consider) wâ: (conjunction) k^hǎw (she) pen
(be) k^hru:yây (principal)/” in Thai.
- V₁ + object + noun (V₁ + object + conjunction + noun in Thai)
For example, “I call her the principal,” in English
and “/c^hǎn (I) riâk (call) k^hǎw (she) wâ: (conjunction) k^hru:yây
(principal)/” in Thai.
- V₁ + object + (to + V₂) + adj. (V₁ + conjunction + clause in Thai)
For example, “I believe her (to be) mad,” in English
and “/c^hǎn (I) c^hǎ:a (believe) wâ: (conjunction) k^hǎw (she) bâ: (mad)/”
in Thai.

These differences cause problems in learning English for Thai students.

d) Adverbs

Errors with adverbs for Thai learners include the failure to add the “-ly” suffix for differentiating manner adverbs from adjectives such as “He drives careful(ly).” and adding the “-ly” to adverbs which must not add the “-ly” suffix such as “She studied hard(ly). The different position of adverbs in a sentence in Thai and English also is a cause of difficulty.

e) Experiential verbs

Experiential verbs *feel, taste, smell, sound, look, seem* and *become* cause errors when the learners fail to differentiate between these verbs and ordinary verbs. The way of using adverbial complements for these verbs is different such as “He felt sad(ly).” It tastes delicious(ly).”

f) Non-continuous verbs

Some verbs in English cannot be used in the continuous form but express ideas similar to the continuous tense such as believe, know, like and have.

2.3.4.5 Syntax: sentence types

This section clarifies a comparison of sentence types in English and Thai. Lekawatana, Littell, Palmer, Scovel and Spenser (1968-1969, 40-59) classify sentences into fourteen types as follows.

a) Minor sentences

Minor sentences occur frequently in both Thai and English. These include exclamations such as vocatives and interjections, aphorisms and answer as minor sentences. Exclamations are not problems because there are similar exclamations in both languages but most aphorisms in English do not have equivalents in Thai, therefore, Thai learners of English must learn them by memorisation and practice. In addition, answers which are used as abbreviated answers are different in using an auxiliary verb in English while using the main verb in Thai, for example, "Do you like to swim?" "Yes, I do.", (in English) and "Yes, I like." in Thai.

b) Simple sentences

There are some differences between the structures of simple sentences in English and Thai. The subject of a sentence in English cannot be omitted while it can be optionally omitted in Thai such as a sentence "Do you want a banana?" can be /tôŋka:n klûay mǎy/ (want/ banana/ question particle) in Thai. Moreover, English uses linking verbs with adjectives but Thai does not such as a sentence "She is very tall." can be /k^hǎw sǔ:ŋ mǎ:k/ (He very tall.) in Thai. These differences cause problems to Thai learners of English.

c) Compound sentences

Compound sentences, sentences of two or more independent clauses which can appear alone as simple sentences, are usually joined together with one or more conjunctions. In both English and Thai, a coordinating conjunction "and" is used to link two clauses which the subjects of both clauses are identical whereas a contrasting conjunction "but" is used to connect two contrary clauses. The similarity of these does not cause problems for Thai learners. However, when other conjunctions without an equivalent form in Thai are used, problems arise. Moreover, some conjunctions in English are similar to other

parts of speech such as a conjunction “besides” and a preposition “beside”, and a conjunction “instead” and a preposition “instead of”. Thus, Thai learners often find these similarities confusing

d) Complex sentences

A complex sentence contains at least one dependent or subordinate clause. Three general types of complex sentences, those involving adjectival constructions, those involving nominalisations and those involving relative clauses are explained. Adjectival constructions are made up in three ways as predicate adjective constructions which can connect to a subordinate clause to form complex sentences. The first type is nominalisation + linking verb + *predicate adjective*, for example, “To fail the exam is *disturbing*.” The second is subject + linking verb + *predicate adjective* + infinitive or gerund, for example, “She is *happy* to pass the exam.”, and “She is *happy* passing the exam.” The last type is subject + linking verb + *predicate adjective* + preposition, for example, “She is *interested* in traveling around the world.” The second and the third adjectival constructions cause problems for Thai learners as there are no equivalent constructions in Thai. Besides, the –ing and –ed adjectival forms also cause confusion for Thai learners. The nominalised clause also makes it difficult to Thai learners about grammatical forms, for example, “*That I am failing the exam* makes me sad”, “*Failing the exam* makes me sad.”, and “*To fail the exam* makes me sad.” A relative clause in a complex sentence which contains a wh- question word is not preceded by a relative pronoun in English, for example, “She knows (that) whom he met yesterday.” For Thai, both relative pronoun and the wh- question word are used in a complex sentence. Therefore, Thai learners confuse the use of this. Additionally, Thai learners tend to confuse the subject-verb order of the dependent clause.

e) Negation

Negation seems to be difficult for Thai learners because there is no distinction between “no” and “not” in Thai. The word “no” in Thai usually precedes verbs, auxiliaries or adjectives. The use of adverbs which function as negatives such as never and seldom and the use of modifiers which usually occur only in the negative such as any and ever makes it difficult for Thai learners as well

f) Questions and tag questions

The formation of questions in Thai is different from that in English. Questions in English are marked by an auxiliary or the verb “to be”, for example, “Is she hungry?” but in Thai

they are marked only by the addition of question particles /rǎ:/, for example, /kʰǎw hǐw rǎ:/ or “she _ hungry + a question particle”. For tag questions, the formation of these in Thai is also different from in English. Tag questions in English always contrast with the opening statement that is if the statement is affirmative, the tag question is negative and vice versa. Tag questions in English must contain an auxiliary or the verb “to be” and a pronoun subject whereas tag questions in Thai are followed by question particles /cʰǎy māy/ and /rǎ:/.

g) Emphatic

Emphasis in English is different from in Thai. In English, the use of part of the verb “to do” is used as an emphatic auxiliary whereas a particle /cɪŋcɪŋ/ is used in Thai, for example, “I did go to school,” and /cʰǎn pay ro:ŋrian cɪŋcɪŋ/ or “I go _ school + an emphatic particle”.

h) Imperative

Simple imperative sentences do not cause much difficulty to Thai learners. However, the speaker’s attitudes present difficulty to Thai learners because the attitudes are reflected by the form of question or imperative sentences in English whereas they are usually reflected by imperative particles in Thai. For examples, “Could you please open the window?, Can you open the window?, Open the window!” in English and /kǎrúna pǎ:t nǎ:tàŋ/ or “please open _ window”, /pǎ:t nǎ:tà:ŋ nǎ:y/ or “open _ window + an imperative particle”, /pǎ:t nǎ:tà:ŋ síʔ/ or “open _ window + an imperative particle” and /pǎ:t nǎ:tà:ŋ/ or “open _ window!”.

i) Passive

The grammars of the passive in Thai and English are different. The verb “to be” is used to form passive forms in English whereas it is not necessary in Thai. Hence, this causes difficulty for Thai learners in forming and understanding the passive in English.

j) Direct and indirect objects

Differences in indicating direct and indirect objects occur between the two languages. There are two grammatical patterns of using direct and indirect objects in a sentence in both languages. Examples for pattern 1 (Subject + verb + direct object + (to) + indirect object) are “He gave some flowers to her.” in English and /kʰǎw hǎy dǎ:k máy kæ kʰǎw/ or “he give _ flower _ to her” in Thai. Examples for pattern 2 (Subject + verb + indirect

object + direct object) are "He gave her some flowers." in English and //k^hǎw hây dâ:kmáy k^hǎw/ or "he give _ flower her" in Thai. Pattern 2 may cause more difficulties for Thai learners because there are more differences in relation to grammar.

k) Stylistic inversions

Word order can be changed in both English and Thai, especially with time adverbs and adverbs which mark location. For examples, "We will study today. – Today, we will study." in English and /raw cà? rian wanní:/ - /wanní: raw cà? rian/ or "we will study today – today we will study" in Thai. Some stylistic inversions can occur only in English but not in Thai, that is, the inversions of "there" and "here" and those of pronoun objects, for examples, "Bob is here. – Here is Bob." and "Here is Bob. - Here he is."

As the foregoing indicates the Thai and English languages are different in very many aspects including vocabulary, morphology and syntax with the latter being concerned with noun phrases, verb phrases and sentence types. Thai readers of English, especially less proficient learners, usually confront problems in these areas because of the differences of these two languages. Therefore, teachers of English for Thai learners could utilise knowledge of these differences and plan their lessons to provide evidence for the Thai students with regard to the differences.

2.4 Research related to L1 usage

Interest in the relationship between L1 and L2 for SLA has grown in the last twenty years (Ellis, 1994, 339; Johnson & Johnson, 1998, 354). Research studies from this period, considered to be of value for this study, are now reviewed.

In the first place there is a large body of work which shows that the student's L1 is crucially involved in the process of learning an L2. The Bernhardt & Kamil study showed that the student's L1 has a strong influence on the learning of the L2 and is only slightly less important than L2 proficiency as a predictor of success. Bernhardt & Kamil (1995, 15-34) studied the relationships between L1 (English) and L2 (Spanish) reading. The purpose of the study was to examine the two hypotheses: linguistic threshold hypothesis (second language reading is a second language proficiency problem), and the linguistic interdependence hypothesis (second language reading is an L1 problem). The subjects were 187 students in three levels of Spanish instruction at the United States Air

Force Academy; 130 students at the beginning level; 24 students at the intermediate level; and 33 students at the advanced level. All subjects had to take a reading test which measured vocabulary, comprehension, and reading rate in English. The test was comprised of three versions of a reading comprehension test which was written in both English and Spanish. The first version of the test which was written in Spanish was taken two weeks before the end of the semester in order to control the learning effects during Spanish instruction. Students in all levels took this version of the test on two consecutive days and then took both the first and second versions in English together. The first English version was translated from the first version in Spanish. The second English version was similar but more difficult than the previous version in Spanish and in English in order to compensate for any practice effects.

The first result of the study showed that the performance on English reading tasks could predict performance on Spanish language reading tasks. The other result revealed that both the first language reading skill and language proficiency affected reading comprehension. Further analysis found that all subjects could get higher scores when reading in their L1 (English) than reading in the L2 (Spanish). Direct questions, which drew upon the words from the passage, were also found to be easier than inferential questions, which required both different vocabulary and style of writing from those in the passage. The subjects could also get higher scores from inferential questions with the same vocabulary than those that contained different vocabulary. This research can explain the fact that reading comprehension in the L2 is affected by both first language reading ability and L2 proficiency. It also shows that direct questions are easier to understand than inferential questions and inferential questions with the same vocabulary as shown in a text are easier to understand than using different vocabulary. Therefore, the finding that second language reading problems arise from both second and first language problems is supported by this study.

A 1996 study by Brooks is representative of an important group of studies which has produced consistent results about the benefit of using L1, even with students engaged in L2 productive rather than merely L2 receptive activities. Brooks (1996, 121-130) examined the use of L1 in foreign language writing in two studies, where the subjects were students, who were studying French at intermediate level in the USA. The first study compared L2 compositions translated from L1 drafts with those written directly in

L2 upon the same topic. The results showed that compositions translated from L1 drafts were better in regard to organization and content development than those, written directly in L2. The second study took a slightly different approach, requiring subjects to prepare either L1 or L2 outlines as preparation for writing L2 persuasive essays. Results from a post-writing questionnaire showed that most subjects used their L1 to develop and argue their essays whatever instructions were given. They also used the L2 to create and link sentences. The studies pointed to the fact that when there are too many competing demands on short-term memory and attention, both being essential for L2 processing, cognitive overload occurred. The use of L1 by the students was a natural and successful strategy for accommodating such competing demands when engaged in L2 writing. Brook's study, which helps to broaden our understanding of the value of using L1, employed a questionnaire to elicit how and when L1 students used their L1 and this particular methodology will influence the present study.

Further evidence of the continuing importance of L1 to L2 learners, even in immersion mathematics programs, is provided in the next study. Cohen (1994b, 171-195) studied the language used to perform cognitive operations during full-immersion mathematics tasks. The subjects were 32 students from the third to sixth grade at a Spanish full-immersion school in the USA. Verbal reports, questionnaire-based interviews, classroom observation and background student information were all used to collect data. While engaging in solving numerical and verbal mathematics problems, the subjects were encouraged to provide their verbal reports in whatever language they felt comfortable. The study found that the full-immersion students were using their L1 more than they were using the L2 while solving mathematics problems. They also shifted from the L2 to the L1 when reading the problem and encountering some conceptual difficulty. This research can account for the fact that many early L2 readers tend to use their L1 to solve problems not only when reading, but also in the other situations such as dealing with mathematics problems.

Having established that L2 learners make good use of their L1 when learning, we must now turn to research relating specifically to reading. In the first study, Kern (1994, 441-461) established that L2 intermediate French students of all levels relied upon translation from English as an aid to understanding and learning. Kern examined whether translation whilst reading facilitates comprehension, and whether one's level of L2

reading affects the degree to which one translates while reading. The subjects were 51 intermediate-level French students, divided into high, middle, and low reading ability groups. Think-aloud interviews while reading French texts were used to collect data as well as class discussions and essays were tested for reading comprehension. Translating into English was not allowed while reading. The subjects were interviewed individually twice, at the beginning of the semester and at the end of the semester. The results showed that translation was used by the readers in all groups but readers in the high ability group used translation least, whereas readers in the low group used translation most frequently. The main advantage of translation was to facilitate the construction of meaning from the L2 forms. Some subjects used translation all the time and some of those used it to deal with specific obstacles such as the complexity of meaning and complicated ideas in the text. This research can help to show that L2 readers use translation to assist the construction of meaning in L2 reading. Even when the use of L1 was prohibited, the students still used it to construct the meaning in L2 texts.

More extensive research of a similar kind has been conducted by Upton and his associates, who have completed three studies in all, 1993, 1997 and 2001. In the first of these Upton (1993,1-2) studied the influence of first and second language use on comprehension and recall when reading English texts. The subjects were Japanese taking ESL subjects at universities in the USA. The purposes of the study were to examine the written recalls in the language of their choice of highly-proficient English second language learners reading an English text, as well as to further investigate the role of the L1 and the L2 in the L2 reading process. Think-aloud verbal protocols and retrospective interviews were used to collect data. The texts were divided into different types of idea units and the written recall protocols were scored using a content-structure system. Findings showed that all subjects used their L1 to help them deal with comprehension gaps. When wrestling with L2 vocabulary and sentence meaning and to confirm their comprehension, the advanced ESL subjects used their L1 more frequently than the more proficient post-ESL subjects for whom ESL assistance was no longer considered necessary.

The second study of Upton still used Japanese as the L1 and English as the L2. Upton (1997, 1-27) studied first and second language reading comprehension strategies of Japanese ESL students whose English language level was slightly lower than in the

1993 study. The same 231 word long text from a quarterly business magazine was used in the study as well as think-aloud verbal protocols and retrospective interviews. The study found that students whose levels of L2 proficiency varied made use of their L1 and L2 differently. Firstly, the lower-level subjects used their L1 more frequently than academic stream students when they had problems about unknown words. Secondly, the first group tended to translate concepts they understood into their L1 whereas the academic subjects tended to use the L2 only while wrestling with meaning. Lastly, paraphrasing or restating sentences and phrases into L1 was utilized more frequently to confirm comprehension by the lower-level group while academic subjects did not use translation frequently.

Most recently, the research program of Upton & Lee-Thompson (2001, 469-495) has been broadened to cover two language groups, Chinese as well Japanese. The subjects were twenty native speakers of Chinese and Japanese, ten Chinese and ten Japanese, enrolled in a university in the USA. The students, all of whom were regarded as competent readers, were divided into three groups based on their English language proficiency and tested by the same texts and instruments as were used in the 1997 study. The study examined what role the L1 plays in the reading strategies of L2 readers and explored further the question of when and how L2 readers make cognitive use of the L1 to help them comprehend an L2 text. The study found that the intermediate ESL students tended to use their L1 to think about and process the L2 reading task more frequently than the advanced ESL students and the post-ESL students. The second research question, relating to the contexts in which the cognitive use of the L1 facilitates L2 comprehension, showed that the intermediate ESL students verbalized in their L1 more frequently than the more advanced ESL students when thinking aloud while the post-ESL students used it the least. In a new development, qualitative analysis revealed that the L1 was used to wrestle with or try to confirm text meaning in five ways. Firstly, readers translated the meaning of words or phrases. Secondly, when uncertain about text meaning, they used their L1. Thirdly, they confirmed their comprehension of larger chunks of text by using their L1. Fourthly, while wrestling with the meaning of text beyond the phrase level, L1 was used. Lastly, the L1 was used to predict or anticipate text structure and content. The use of actual examples of these five processes indicates that the L1 was used in both supportive and nonsupportive ways to comprehend the text.

These three research studies of Upton have provided a detailed account of the use of L1 on L2 readings. Findings from these studies showed that all students use their L1 in L2 reading but the lower proficiency levels tended to use their L1 more often than the higher levels. In all the studies, wrestling with L2 vocabulary and sentence meaning in the L1 took place in order to fill comprehension gaps. Furthermore findings from the most recent study showed five ways of using the L1 to confirm text meaning while reading: translating the meaning of words or phrases, confirming meaning by translating, checking the comprehension of larger chunks of texts, wrestling with the meaning of chunks of text beyond the phrase level and trying to predict or anticipate text structure and content (Upton & Lee-Thompson, 2001, 481).

The latter study in particular will be used to guide the examination of the use of the Thai language on reading English texts in this study. However, these studies were interested in the use of the L1 only to assist comprehension, but did not connect the supportive use of the strategy with success in reading comprehension. This study plans to remedy this lack by making connections between answers to questions on the text and L1 usage. Obviously too, students in these studies were more proficient in using English than students in Thailand, because they were studying in an English speaking country and English was being used as a medium in their class environments. Despite the fact that students in these studies had many more opportunities to learn and use the L2 than undergraduate students in Thailand, they were still thinking in their L1 and making very considerable use of translation. For all these reasons, this researcher suggests that it is very important to examine the role the Thai language plays in the development of reading comprehension skills by Thai undergraduates.

2.5 Theoretical framework

The theoretical framework for the study has been constructed from the foregoing literature review. If second language students want to develop their reading skills they must first receive comprehensible input in order to acquire new language by linking ideas with language. When they deal with that input, however, the use of their L2 knowledge, together with language and schemata from their L1, will help them comprehend the reading text. Both these elements will affect the central process of obtaining meaning, which Cohen (1990, 77-80) has described as the two stages of recoding or recognising

the written symbols and decoding or constructing meaning. Where aspects of the L1 are similar to the new input from the L2, students can make use of these similarities to comprehend the readings.

While the students are recoding and decoding, bottom-up and top-down skills are used to comprehend the text and any lack in either skill can be compensated by skill in the other. The final stage leading to L2 comprehension is based on Conley's view of assimilation and accommodation (Conley, 1992, 55-59). This is very similar to Cohen's decoding stage but it expands it by highlighting the two methods of doing this namely of taking in new ideas or language as well as changing present schema and language rules.

This process, illustrated in Figure 1, helps to explain how Thai students use both the L1 and L2 to develop the English reading skills. In examination of this process in the Thai context, it is intended that the subsequent research will further explain this framework of the reading comprehension process as shown in Figure 1.

In the figure, the two parts of SLA theories and processes are represented by the two different geometric shapes, that is ○ and □.

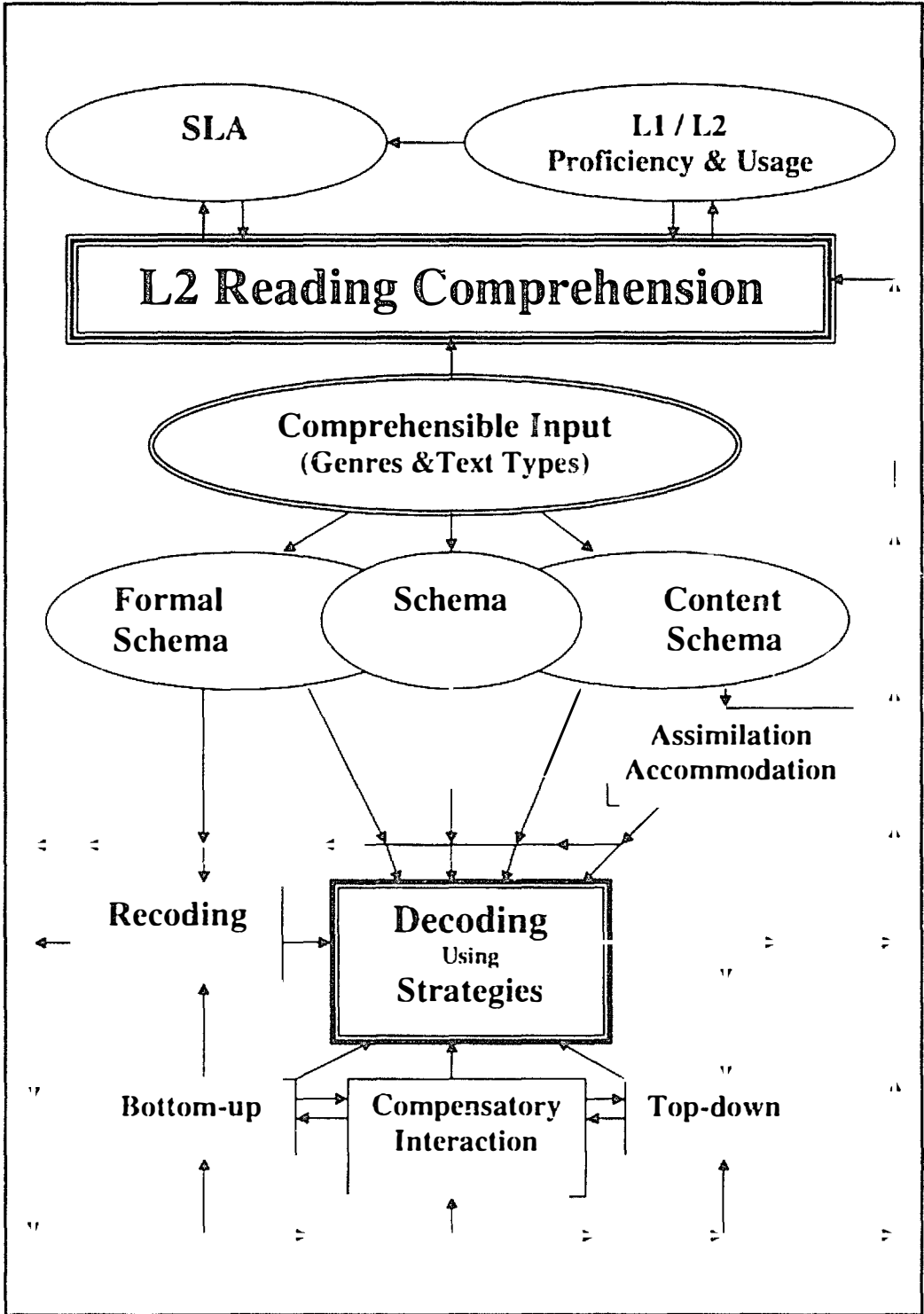


Figure 1 L2 Reading comprehension theoretical framework

2.5 Research questions

Answers to the following research questions will provide the information necessary to gain insights into aspects of the reading process related to Thai undergraduates

1. The use of Thai in reading comprehension

- 1.1 To what extent do the students use Thai when reading English?
- 1.2 To what extent does the use of Thai vary according to genre or text type determined by content?
- 1.3 To what extent does the use of Thai vary according to question type that is with bottom-up and top-down questions?
- 1.4 Does a stated preference for text type have any effect on scores?
- 1.5 With which genre and text type do the students obtain better scores?
- 1.6 What opinion do the students hold about the use of Thai and how Thai assists reading comprehension?

2. The use of strategies in reading comprehension

- 2.1 What strategies do the students use when reading English?
- 2.2 Is the use of Thai in implementing strategies linked to the students attainment of better scores?
- 2.3 Is the use of formal schema or content schema more prominent?

3. The identification of problems in reading comprehension

- 3.1 What problems do students face when reading English texts?

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter sets out the research methodology for the present study, which investigates the influence that the Thai language has on intermediate level undergraduate students in Thailand while they are reading a variety of English texts. It is presented in eight parts, preparation for the study, research study, data collection, data analysis, research hypothesis, limitations of the study, ethical considerations and summary.

Reading comprehension problems for second language learners prevent students from understanding the texts they meet in their studies. Some researchers have already studied the first language role in L2 reading comprehension, but this study focuses on student performance in reading text types differentiated according to the content and genre. Student tasks, retrospective interviews and questionnaires using both quantitative and qualitative methods are described together with methods of analysis of the same.

3.1 Preparation for the study

Preparation of the study was needed to be sure that the research study could be conducted without major problems. Therefore, the researcher had to experiment with the process of collecting data including process, instruments and timing. Preparations for this study involved four pilot studies.

3.1.1 Pilot studies

Four pilot studies preceded the research proper because the researcher needed to choose a suitable design for the instruments and methods of collecting data. Therefore, several pilot studies and their results were needed for obtaining the best guidance for the research.

The first pilot study was concerned with three second year students majoring in English from two programs at Udon Thani Rajabhat University, the English and the English education programs. A task, based on six texts and ten multiple choice questions for each text, was used as well as several data collection methods including think-aloud

verbal reports, retrospective interview and the combination of think-aloud verbal reports and retrospective interview. The second pilot study was conducted in Australia with a Thai student studying English courses at a university in Australia. In this a task, based on two texts followed by five top-down multiple choice questions and five bottom-up multiple choice questions for each text, was used as well as retrospective interviews. The third pilot study involved a second year teacher trainee student majoring in English from Loei Rajabhat University. Five top-down open-ended questions and five bottom-up open-ended questions as well as questions to elicit student thoughts for each question were devised to accompany two texts. One sentence taken from each text needed to be explained in written form first and then by retrospective interview. For the last pilot study, five second year teacher trainee students majoring in English from Sakon Nakhon Rajabhat University engaged in the study. The task, as in the third pilot study, was still used as well as the retrospective interviews followed by the questionnaire.

3.1.2 Issues arising from pilot studies

The results from each pilot study were very useful to guide the researcher about how the participants responded to the tasks and how to draw out their thoughts. These are stated in terms of two issues, refining the tasks and collecting participant thoughts.

Refining the tasks

In order to look for the best guide for the research study, the tasks were refined step by step. There were several reasons for this. For the first reason, trials of using several reading comprehension tasks enabled the researcher to really know if the participants understood the texts themselves. The second reason was to ensure that the questions did not interfere with participant comprehension by adding additional challenges. The last reason was to discover the best activities for collecting data.

Consequently, the tasks were refined several times in terms of the following aspects in order and finally produced the following observations.

For the first pilot study, multiple choice questions were used. The reading comprehension task consisted of three parts dealing with cities, economics and editorials. For each part, there were two reading texts of a similar level of difficulty and discourse from the same kind of source, one a culturally familiar text which was related to Thailand

and the other a culturally unfamiliar text which was not related to Thailand. The texts for the first part were concerned with cities, Bangkok and Belgrade, for the second part with Thai and German economics, and in the third part were concerned with Thai and Iranian politics. Each text was followed by ten mixed multiple choice questions based on the meaning of each text. The results showed that the participants attained high scores because all of them were good readers but it was difficult to separate where the students were having problems, whether in the text or in the question. In addition, participants reported that the texts were too long so the latter were shortened.

Top-down and bottom-up multiple choice questions were introduced in the second pilot study. In the revision of the reading comprehension task, all texts were shortened to be 150-210 word texts. The questions were still multiple choice questions, but the types were adjusted to have approximately equal numbers of both bottom-up and top-down questions as follows:

- Literal language questions (bottom-up) with a focus on word, parts of the word, phrase, and sentence level. (2-3 questions for each text)
- Figurative or idiomatic language questions (bottom-up) focus on phrase and sentence level. (2-3 questions for each text)
- Overview or global questions (top-down) with a focus on paragraph, and whole text level. (2-3 questions for each text)
- Cohesive questions, linking ideas, (top-down) with a focus on conjunctions, link words, pronoun reference, and redundancy. (2-3 questions for each text)

The results showed that the participant frequently used his prior knowledge and guessed the answers from the choices instead of reading from the texts thus confirming that multiple choice questions were unsuitable. Therefore, a new reading comprehension task with open-ended questions instead of multiple choice questions was devised to prevent guessing the answers from the choices.

For the third study a completely new reading comprehension task was devised. Top-down and bottom-up open-ended questions, followed by a question about student thoughts when answering each question and another explaining a sentence, were introduced in this new study. The task comprised two texts about cities taken from the New Encyclopedia (Micropedia) Britannica, one about Bangkok and the other about Wellington. Ten open-ended questions consisting of half top-down and half bottom-up

were utilised as well as questions about student thoughts for choosing each answer to be written down in Thai. The meaning and problems with understanding one sentence taken from each text needed to be explained in Thai. The result showed that this type of reading comprehension task could prevent the participant from guessing the answers from choices, as the student had to read the texts for finding the correct answers from the texts themselves. In addition, a further two reading comprehension tasks were devised in the same design and these became the tasks used in the fourth pilot study.

Top-down and bottom-up open-ended questions followed by a question about student thoughts about answering each question and explaining a sentence were utilised in the fourth pilot study. There were three reading comprehension tasks for the last pilot study. These three reading comprehension tasks represented different genres, that is, transactional or information-based, editorial, and experiential or narrative texts. For each genre, there were two short reading texts of a similar level of difficulty and discourse taken from the same or similar sources, one a culturally familiar text which was related to Thailand and the other culturally unfamiliar text which was not related to Thailand. These were followed by ten open-ended questions to be answered in English and commented on in Thai. From each text, too, one sentence had been highlighted and students were also asked to write down in Thai the problems they had in comprehending the sentence taken from each text. The results showed that participants used several strategies of using Thai to facilitate their comprehension. However, there were some problems which arose from using the task, that is, some students did not answer some questions nor did they write down their decisions behind the answers. Furthermore, some students did not think carefully about the answer so they took only a short time to do the task.

The process of working through these four studies had, thus, provided valuable experience in relation to the actual decisions making about both texts and question types. However, one other major issue remained.

Collecting participant thoughts

The second issue is concerned with how to collect the participant thoughts about comprehension whilst reading. Thoughts are mental processes which cannot be observed

from external observation and are therefore difficult to discern. The researcher tried to use several kinds of methods to collect participant thoughts.

For the first pilot study, verbal reports; think-aloud, a retrospective interview, and the combination of think-aloud and a retrospective interview were used. Verbal reports have been used in earlier studies as a means to study the cognitive processes of a reader. Three basic types of verbal reports have been utilised in research studies to elicit the conscious mental processes involved in language learning, that is, self-report, self-observation and self-revelation (Cohen, 1990, 94-95). Self-report refers to descriptions of a learner about what they do and report in generalised statements. Self-observation refers to the inspection of specific language behavior, either introspectively while the information is still in the short-term memory and retrospectively about 20 seconds after the activities. Retrospection can be within an hour of the activity or a few hours, days or weeks after the activities. The data from delayed retrospection may not be as complete as data from immediate retrospection. The last type of verbal reports, self-revelation, refers to think-aloud while engaging in language activities. The data are reported as unedited and unanalysed data (Cohen, 1990, 94-95; Norris, 1988, 1-21; 1989a, 1-19; 1989b, 1-30; Tierney, Readence, & Dishner, 1995, 284-287; Wenden & Rubin, 1987, 32-33). For the first pilot study, the researcher tried to use both think-aloud verbal reports and retrospective interviews to collect data. Think-aloud verbal reports were used with the first participant and a retrospective interview was used with the second one, while the third participant used both think-aloud and a retrospective interview. The results showed that the retrospective interview was able to elicit more details than think-aloud and could also be less time-consuming than the combination. Therefore, retrospective interviews were chosen for other pilot studies and the research proper.

For other pilot studies, retrospective interviews were utilised to gather the thoughts from mental processes of comprehension. This was done by means of a questionnaire about the usage of using Thai to assist the students' comprehension and their feelings when using Thai to facilitate their comprehension was introduced in the pilot studies was used in the fourth pilot study. Moreover, introspective questions about the thoughts when using Thai to assist the students' comprehension in the reading comprehension tasks were used in the third and the fourth pilot studies. They were introduced to elicit the students' mental processes.

To sum up, it was considered that meaning-based open-ended questions, followed by simultaneous introspective questions about the decisions for the answers followed by a sentence to be explained and the problems about comprehending the readings, were most suitable for the research proper. These tasks could collect data and could elicit the thoughts simultaneously either at the time of completing the task or directly afterward. The retrospective interviews were also added because the researcher could elicit more details from the participants' thoughts by this technique immediately after completing the tasks. To clarify this process, a sample of activities for collecting data with one task is shown in Table 1. Each task involves reading two texts representing the one genre.

Table 1 A sample of activities for one reading comprehension task

Time	Activities
1 hour	1. Reading comprehension task, text 1 <ul style="list-style-type: none"> • Answer 10 open-ended questions as well as introspective questions in writing • Explain the meaning of one highlighted sentence from the text in writing
1 hour	2. Retrospective interview Engage in an interview about how answers were obtained
1 hour	3. Reading comprehension task, text 2 <ul style="list-style-type: none"> • Answer 10 open-ended questions as well as introspective questions in writing • Explain the meaning of one highlighted sentence from the text in writing
1 hour	4. Retrospective interview <ul style="list-style-type: none"> • Engage in an interview about how answers were obtained

In addition, a separate questionnaire, obtaining reflections and used one week after completing all tasks was added in order to allow for triangulation about the cognitive processes.

3.2 The research study

The research study started four weeks after finishing the last pilot study in order to allow time to adjust the reading comprehension tasks, the interviews, the interview schedule and the questionnaire.

3.2.1 Subjects

The subjects were twenty second year trainee students from Udon Thani Rajabhat University, fifteen subjects of whom were females and the other five males. All subjects were chosen from the students who were able to express their ideas in both reading comprehension tasks and interviews and be willing to contribute to the study. The subjects had studied about reading strategies, that is, skimming, scanning, finding the main idea and finding supporting details when they studied reading courses in the first year and the second year at the university. However, the subjects had not been trained about ways of using the Thai language or of strategies to assist their understanding of the English readings.

3.2.2 Study

The research study took three weekends each of which was devoted to one genre. Both Saturdays and Sundays were utilised, because the subjects were divided into four groups and each group took about four hours for completing each task. Therefore, data collection for each genre was conducted on Saturdays and Sundays, five students in the morning and five students in the afternoon on both days. A sample schedule for the first of the three weekends is shown in Table 2.

Table 2 Schedule for collecting data

Week	Day	Students	Time	Activities
Each Weekend	Saturday	First Group	8.00-9.00 am	Transactional texts, text 1, Bangkok
			9.00-10.00 am	- Retrospective interview
			10.10-11.10 am	Transactional texts, text 2, Wellington
		Second Group	11.10 am-12.10 pm	- Retrospective interview
			1.00-2.00 pm	Transactional texts, text 1, Bangkok
			2.00-3.00 pm	- Retrospective interview
			3.10-4.10 pm	Transactional texts, text 2, Wellington
	Sunday	Third Group	4.10-5.10 pm	- Retrospective interview
			8.00-9.00 am	Transactional texts, text 1, Bangkok
			9.00-10.00 am	- Retrospective interview
		Fourth Group	10.10-11.10 am	Transactional texts, text 2, Wellington
			11.10-12.10 pm	- Retrospective interview
			1.00-2.00 pm	Transactional texts, text 1, Bangkok
			2.00-3.00 pm	- Retrospective interview
3.10-4.10 pm	Transactional texts, text 2, Wellington			
4.10-5.10 pm	- Retrospective interview			

3.3 Data collection

Data collection methods, the reading comprehension tasks, the retrospective interviews and the questionnaire, are described in this section. Data from these different methods can be triangulated to enhance the reliability of the results.

3.3.1 Reading comprehension tasks

The three reading comprehension tasks represent different genres, that is, transactional or information-based, editorial, and experiential or narrative texts. For each genre, there are two short reading texts of a similar level of difficulty and discourse taken from the same sources or the similar source, one a culturally familiar text which is related to Thailand and the other culturally unfamiliar text which is not related to Thailand. These are followed by ten open-ended questions to be answered in English and

commented on in Thai. From each text, too, one sentence had been highlighted and students were also asked to write down in Thai the problems they had in comprehending the sentence taken from each text. It took about two hours for responding to each task. Each task, therefore, comprises a pair of parallel texts, followed by ten open-ended questions together with an introspective question attached to each question, and one sentence related to the meaning of a sentence selected for the text.

1. Texts: The texts used in this study are 150–210 word texts representing different genres, that is, transactional, editorial and experiential texts. These genres were chosen in order to use several forms of text, that is, transactional texts inform and describe, editorial texts contain a point of view and experiential texts related to narrative (Alderson, 2000, 127). The texts, selected to suit the intermediate level of second year students were taken from authentic materials. Authentic materials should be utilised because they can lead to positive outcomes and learners can develop their communicative competence (Clarke, 1989, 119-132; Feng & Byram, 2002, 58-84; Hall, 2001, 229-239; Morton, 1999, 177-182; Peacock, 1997, 144-154). Thus, using these authentic texts can support the aims of Rajabhat syllabus. Details are as follows:

- The first two texts are transactional or information-based texts concerned with cities, taken from the New Encyclopedia (Micropedia) Britannica.
 - A culturally familiar text about Bangkok, Thai context text, is a 148 word text (*Encyclopaedia Britannica*, 1994a, 866).
 - A culturally unfamiliar text about Wellington, non-Thai context text, is a 178 word text (*Encyclopaedia Britannica*, 1994b, 572).
- The second two texts are editorial texts concerned with politics, taken from a Thai English-medium newspaper, The Nation.
 - A culturally familiar text about politics in Thailand, Thai context text, is a 219 word text (Janviroj, 2001a, 4A).
 - A culturally unfamiliar text about politics in Iran, non-Thai context text, is a 234 word text (Janviroj, 2001b, 6A).
- The last two texts are experiential or narrative texts taken from autobiographical books.
 - A culturally familiar text, Thai context text, taken from a Thai teacher's story (Prajub Thirabutana, 1971, 31). It is a 192 word text.

- A culturally unfamiliar text, non-Thai context text, taken from the life of an American woman (Helen Keller, 1961, 33-34). It is a 206 word text.

For each pair of texts, the researcher tried to select parallel texts at a similar level of difficulty and discourse by choosing texts from the same sources for the first and the second pairs and similar sources for the third pair. However, texts for each pair were not exactly equal in a level of difficulty and discourse, because it would not be possible to find exactly equal texts which would at the same time meet the requirements for both genre and text type. Distinctions between the latter elements were considered of prime importance ahead of any more exact matching of lexical / structures characteristics.

2. Text-based questions: Open-ended questions, to be answered in English or in Thai when students could not answer in English, were used in this study in order to concentrate attention on the texts themselves rather than on multiple choice answers and also prevent students from guessing the answer from choices. These comprise ten questions for each text, divided into four categories.

- Literal language questions (bottom-up) with a focus on word, parts of the word, phrase, and sentence level. (2-3 questions for each text)
- Figurative or idiomatic language questions (bottom-up) focus on phrase and sentence level. (2-3 questions for each text)
- Overview or global questions (top-down) with a focus on meaning gained from the paragraph, and whole text. (2-3 questions for each text)
- Cohesive questions, linking ideas, (top-down) with a focus on conjunctions, link words, pronoun reference, and redundancy. (2-3 questions for each text)

Half bottom-up and half top-down questions were included in order to investigate in which area students have the greater number of problems in reading and how the use of Thai can lessen these difficulties in comprehension.

3. Introspective question: An introspective question as “*How did you get the answer for this question?*” was used to elicit students’ mental processes for answering each question. For this question, students were asked to answer in Thai in order to enable students to express their actual thoughts while reading texts.

4. Sentence: After students had completed the ten open-ended questions together with an introspective question, they also wrote down in Thai the problems they were having in comprehending one sentence, which was highlighted in the text. These sentences were chosen from those which were considered difficult to understand.

An example of one sentence from the Thai politics text is as follows.

Nothing, of course, can mend broken fences and restore relations like a high-level visit, especially when it involves a new leader who is anxious to build up his regional stature and show he is progressive and open-minded.

(Copies of reading comprehension tasks together with the full texts and the questions and the sentence for each text are found in appendix A, page 289-321.)

5. Marking system: For answering the open-ended questions, each answer was marked out of 2. Where the student was able to comprehend the text and answer the question with at least a reasonable degree of understanding, a score of 2, 1.5 or 1 was awarded and these marks are taken as indications of better scores. Conversely, a score of .5 or 0 was given to those students having difficulty with comprehension. In addition, a sentence to be explained the meaning in Thai was marked out of 5. When the students could explain the meaning of a sentence with a degree of understanding, a score of 5, 4.5, 4, 3.5, 3 or 2.5 was awarded, whereas the students who could not explain the meaning or misunderstood the meaning of the sentence would gain a score of 2, 1.5, 1 or 0.

3.3.2 Retrospective interviews

Retrospective interviews were used to elicit the subjects' thoughts soon after completing each part of the task. Because of time constraints, five subjects in each group had to engage in the interview at the same time. Four assistants were thus needed to complete the interviewing group with the researcher. The researcher assistants who acted as interviewers were chosen from the English Program at Udon Thani Rajabhat University. All of them were the fourth year students especially trained to be interviewers for retrospective interviews to elicit the mental processes about the use of Thai to facilitate reading comprehension of the subjects.

In this study, the subjects were interviewed in Thai by the researcher or one of the interviewers one at a time soon after completing the task in each part. Each interview took about one hour. The interviewees had been advised to answer the questions by

expressing everything that was in their minds at the time of completing the task questions about the genre of the day. The interviews were tape recorded and used the following retrospective questions to obtain student responses.

- How did you get the answer to each question? Why?
 - Did Thai help you retrieve ideas?
 - Did Thai help you to formulate ideas?
 - Did Thai help you understand the L2 in the text better?
- How often do you think you used the Thai language altogether?
- Did you think in English at all? When?

At the end of the last interview for each task, the students were asked about their preference for text type, a Thai context text or a non-Thai context text as follows:

- Which text do you like? Why?

This study used retrospective interviews to collect data because the use of the first language to assist completing second language tasks is a mental process so it is difficult to use methods other than verbal reports. This type of interview is a suitable method used to elicit learner responses to a set of questions and it is also used to assess language learning strategies (Cohen, 1998, 26-27). It is also a type of verbal report during which students describe some language learning or language use, soon after doing activities (Cohen, 1998, 34-36). Therefore, although previous research of this type frequently made use of think-aloud protocols, a retrospective interview was chosen as a measure for these cognitive processes in this case. In summary, the decision was taken to use retrospective interviews immediately following the task for the following reasons.

1. Lack of familiarity with think-aloud may interfere with student thinking processes.
2. The focus of the research is on examining real situations where students are working on developing their comprehension.
3. The difficulties of implementation with novice researchers and timing / financial problems would be considerable.

3.3.3 Questionnaire

The questionnaire based upon reflection was used one week after completing all tasks in order to triangulate the cognitive processes of the students.

3.4 Data analysis

The data collected can be classified into two kinds, quantitative and qualitative. Quantitative data are observations or measurements that are numerical whereas qualitative data are observations that can be classified into nonnumerical categories. An individual observation belongs to precisely one category (Dietrich & Kearns, 1989, 19; Freund, 2001, 7). In this study, qualitative and quantitative data from the three tasks, the interviews and the questionnaire have been analysed in different ways.

3.4.1 Qualitative data

Qualitative data were derived from the answers for the questions which asked students to write down the decisions which lay behind each answer in the tasks as well as from opinions expressed in the interviews and part B of the questionnaire. Both the interview data and answers from the subjects' decision behind the answer from the tasks were transcribed and translated into English. The accuracy of the translation of samples, that is, one reading comprehension task and one interview was checked by a well-qualified professional in both English and Thai before analysis. These qualitative data needed to be analysed into categories for finding the strategies of using Thai to assist the comprehension and for finding the reading problems. The analysis is reported in terms of two issues as follows:

Strategies for using Thai

In order to find out how Thai plays a role in reading L2 texts, qualitative data from the interviews and data about student's decisions behind the answers from the tasks were initially categorised. They were coded into eight strategies drawn from the reasons of using Thai to facilitate comprehension actually stated by the students. These strategies are identified as follows with the 'S' standing for 'strategy':

- S1 to translate a word or a phrase itself
- S2 to examine or think about the context of words or phrases or guess the meaning from context
- S3 to understand the meaning of the sentence or find a reason
- S4 to confirm the reader understands about the sentence
- S5 to compare the English with the Thai grammar by using formal schema
- S6 to access or find the reader's ideas by using content schema
- S7 to construct or formulate ideas
- S8 to summarise ideas
- S0 no use of Thai

Qualitative data from part B of the questionnaire are analysed into two categories, that is, the advantages of using Thai to comprehend L2 texts and student reading habits and interests. These data assist in the triangulation of the information from the interviews and the tasks.

Problems in reading comprehension

The answers from the open-ended questions were analysed and allocated to one or more of four categories, general problems, grammar problems, problems with punctuation and problems with linkage by coding into 19 groups as follows with the 'P' standing for 'problem'.

General problems

- P1 cannot understand the word(s) in the question or cannot find the answer
- P2 can find the answer but cannot explain in his/her own words or exact quote
- P3 can answer only part of the question
- P4 uses content schema instead of reading

Grammar problems

- P5 parts of speech
- P6 recognising English word order i.e. adjective + noun
- P7 breaking up words into prefix / root
- P8 singular / plural

P9 pronouns and possessive pronouns

P10 double and participial adjectives

P11 tense

P12 subject / verb agreement

P13 passive voice

P14 verbs after preposition; participle / gerund

Problems with punctuation

P15 problems with apostrophe

P16 in apposition and relative clause between two commas

P17 punctuation; commas, semicolon

Problems with linkage

P18 conjunctions

P19 reference words; (personal, relative, possessive) pronouns

Data about problems encountered while reading sentences from each task and from a questionnaire were analysed by means of content analysis. These problems were then analysed as representing a problem relating to either sentence part or bottom-up problems and overall meaning of the sentence or top-down problems.

Qualitative data analysis is reported in chapter 4, 5, 6, 7 and 8.

3.4.2 Quantitative data

Quantitative data are analysed by means of statistics. Multiple responses and cross tabulations from SPSS program are used to analyse the strategies of using Thai to assist the students' comprehension related to scores, question types, and problems. A pair sample T-test indicated the difference between the scores of the Thai and the non-Thai context texts. Moreover, a mixed factorial ANOVA was used to analyse the differences between the scores and preferences of text type, the Thai context texts and the non-Thai context texts. Frequencies of all responses of quantitative data were shown by means of percentages. Quantitative data analysis is reported in chapter 4, 5, 6 and 8.

3.5 Research hypothesis

The expectation is that the Thai language will be widely used by the students and that it will have an influence on the comprehension of English texts. The extent and nature of both Thai language and content transfer is estimated and exemplified. Whether the use of such transfer is positive or negative remains to be revealed, but it is hypothesised that the familiar texts will lead to more positive transfer and attitudes than those that contain less familiar material. In addition, when they encounter reading problems, the strategies of using Thai to assist comprehension will be used to help overcome problems.

3.6 Ethical considerations

Participants in the study were entirely voluntary and all information was treated as confidential. In addition, to preserve the anonymity of the participants, names were not used and students were identified by numbers, for example, S01A, S02B, and S03C.

3.7 Summary

The study involved twenty second year teacher trainee students majoring in English from Udon Thani Rajabhat University. The subjects completed three reading comprehension tasks consisting of transactional texts, editorial texts and experiential texts based on both Thai and non-Thai contexts. Retrospective interviews were utilised for the study as well as the questionnaire. Quantitative data on the resultant scores were analysed by means of statistics and qualitative data were analysed by means of content analysis and categorised by coding into groups.

The next chapter will begin the descriptions of how students dealt with the three genres and will report the analysis on reading comprehension task 1, transactional texts.

CHAPTER FOUR

READING COMPREHENSION AND TRANSACTIONAL TEXTS

This chapter focuses on the analysis of reading comprehension of transactional texts, concerned with cities and taken from the New Encyclopedia Britannica. Twenty students completed reading comprehension task 1 which consisted of questions about these two texts. The first text, Bangkok, was a culturally familiar text or a Thai context text and the second, Wellington, was a culturally unfamiliar text or a non-Thai context text. In this chapter, the relationships between scores and text type preferences, scores and text types, and scores and question types are presented. After the identification of strategies used by the students, the relationships between these strategies and scores as well as question types are discussed. Finally, problems mentioned by the students in comprehending the transactional texts are categorised and then related to top-down and bottom-up questions.

4.1 Preference of text types and scores

This part of the chapter relates to the relationship between the preference of text types and the scores of reading comprehension task 1, transactional texts. The results, calculated by using the SPSS program, are displayed in tabular, pie graph and bar graph forms accompanied by a brief explanation of the result.

4.1.1 Preference for text type

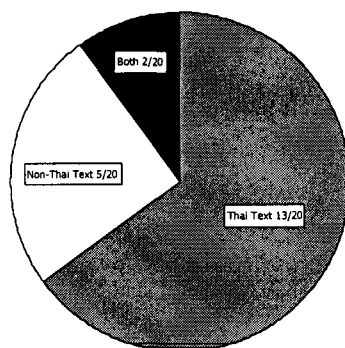


Figure 2 Numbers of students for text type preference, transactional texts

This figure shows that around two-thirds of the students prefer the Thai context text whereas a quarter opts for the non-Thai context text. Only two students mention a liking for both types of text.

4.1.2 Preference for text type and scores

The preferences for the two text types, the Thai context text and the non-Thai context text, related to mean scores in each preference group are displayed in Table 2.

Table 3 Mean overall scores of reading comprehension task 1, transactional texts, for the Thai and the non-Thai contexts texts in each preference group

Preference		Text	Mean	N	Std. Deviation
Thai Text	Pair 1	Thai Text	9.38	13	1.68
		Non-Thai Text	10.30	13	3.50
Non-Thai Text	Pair 2	Thai Text	8.40	5	2.32
		Non-Thai Text	10.50	5	2.47
Both Texts	Pair 3	Thai Text	9.50	2	.70
		Non-Thai Text	11.75	2	3.88

Table 3 shows the means of each text for each group of students. The scores for the non-Thai context text are slightly higher than the scores for the Thai context text according to the preferences expressed for the two texts. Although around two-thirds of the students prefer the Thai context text, the scores for it are slightly lower than for the non-Thai one. A quarter of the students state a preference for the non-Thai context text and they can achieve higher scores with that text. Only two students admit to having an equal liking for both texts and their scores are only slightly better than in the case of the non-Thai text. Moreover, standard deviations for the non-Thai text in the each group are higher than the Thai one. In addition, those for the last group are much higher because of the small amount of students in this group.

The analysis indicates the fact that the preference of text has a positive effect in the case of the non-Thai context and both text preferences, but the scores of those preferring the Thai context text show no such effect. It does mean however that dealing with an unfamiliar topic of itself does not in itself interfere with comprehension. Nevertheless, if we examine the gap between the means of both texts for only the Thai context preference group, the scores of the non-Thai context text vary by only one mark. Thus we cannot conclude that there is a strong relationship between liking a text and scoring well. In any case we cannot infer that the preference of text type has a positive effect on scores until results in the next two chapters for other genres, the editorial and experiential texts are taken into account.

The analysis in this case has revealed a slight anomaly. Preference for the non-Thai context text is closely connected to scores for that text but this is not the case for the Thai context text. In relation to the latter, a preference did not result in higher scores. Nonetheless, when a mixed factorial ANOVA¹ was used to analyse the differences between the scores according to preference for transactional texts, no statistically significant differences were found. Although it appeared that overall students scored better on the non-Thai text, the difference was not significant ($F_{(1,17)} = 2.993, p = 0.102$). There were no significant differences between the three preference groups ($F_{(1,17)} = 0.239, p = 0.790$) and no interaction between preference for transactional text and type of text ($F_{(1,17)} = 0.284, p = 0.756$).

4.2 Transactional texts and scores

The students completed reading comprehension task 1 which consisted of two transactional texts, Bangkok and Wellington. This was followed by ten open-ended questions to be answered and one sentence-based task in which the meaning was to be explained in Thai. The overall scores from reading both transactional texts are displayed in Table 4.

¹ Within-subjects factor – type of text (Thai vs non-Thai).

Between-subjects factor – preference for transactional text (Thai text, non-Thai text, both texts)

Table 4 Overall scores for reading comprehension task 1, transactional texts

Score Types	Total Scores	Minimum	Maximum	Mean	Std. Deviation
Task Scores	50	12.50	25.50	19.65	3.91
Question Scores	40	9.50	21.00	15.17	3.49
Sentence Scores	10	1.00	7.50	4.47	1.71

The results show that the students gained overall scores below fifty percent, although a few students obtained slightly higher than fifty percent for these texts. In Table 4 the overall scores for transactional texts are presented. Both sets of scores are low but those for the sentence are slightly lower than total scores. Additionally the maximum scores for each score type are slightly higher than fifty percent. When sentence scores and question scores are combined, therefore, the totals are lower than fifty percent.

The next section will relate scores and text – question types.

4.3 Context types, question types and scores

This part reports on the findings from the data analysis on the relationships between context and question types and scores. The results are shown in a table and bar graphs followed by a short explanation of the results.

4.3.1 Context types and scores

The scores from reading these two texts are different according to the type of text. Descriptive statistics are reported in Table 5.

Table 5 Task, question and sentence mean scores for transactional texts

Text	Total Scores	Minimum	Maximum	Mean	Std. Deviation
Thai Text Task Score	25	5.50	12.50	9.15	1.78
Non-Thai Text Task Score	25	5.00	16.00	10.50	3.17
Thai Text Question Score	20	4.50	11.00	7.13	1.65
Non-Thai Text Question Score	20	2.50	11.50	8.05	2.61
Thai Text Sentence Score	5	1.00	3.00	2.03	.60
Non-Thai Text Sentence Score	5	.00	5.00	2.45	1.46

Table 5 illustrates the comparison between the scores for the two transactional texts in all aspects. The overall task scores, question scores and sentence scores for both texts are lower than half, but those of the non-Thai one are slightly higher than the Thai one. Although those scores are somewhat similar, greater differences appear when the range of scores is examined. The range of the non-Thai text scores is wider than the Thai text scores, the maximum scores being higher and the minimum scores being lower. Owing to the spread of scores, the standard deviation for the non-Thai text scores in all aspects is larger than that for the Thai one.

A paired sample T-test was used to analyse the differences between the scores of the Thai and the non-Thai context texts for transactional texts. The results show that there are no statistically significant differences ($p > .05$) between task scores for the two texts ($t = -1.816$, $df = 19$, $p > .085$, two-tailed), question scores ($t = -1.584$, $df = 19$, $p = .130$, two-tailed) and sentence scores ($t = -1.333$, $df = 19$, $p > .198$, two-tailed). Both the small sample size and variability of students may have precluded a significant effect.

These results suggest that the students in this study performed at a similar level when dealing with a text about unfamiliar as well as familiar subjects.

4.3.2 Question types and scores

The ten open-ended questions for each text in the task comprised four categories of question type, that is, literal, figurative, global and cohesive. Differences between the application of these question types to the texts may cause varying difficulties for students trying to comprehend the texts. The nature of the responses to these differing questions can be seen from the percentages of correct answers for each question type.

Overall for both transactional texts, the highest scores are obtained with literal questions with global questions just a little lower. However, the results of figurative questions are much lower than for any of the others as shown in Figure 3.

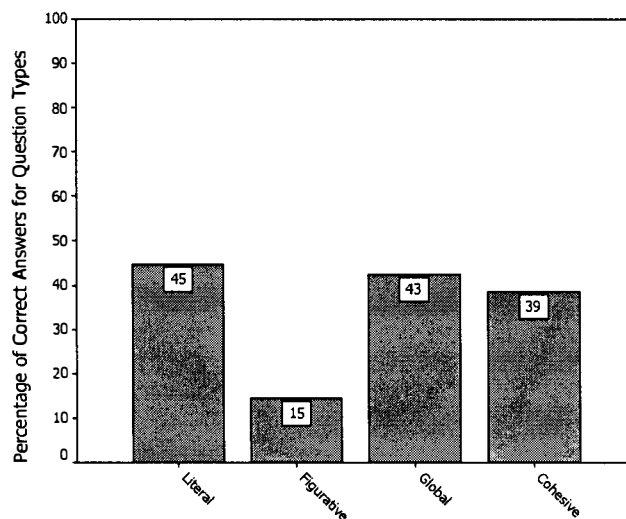


Figure 3 Percentage correct for each question type of transactional texts

When the results are compared for the four different question types from both texts, the results are rather unexpected. The scores of literal and figurative questions of the Thai text are lower than the scores of the non-Thai text, while those of global and cohesive questions for the Thai text are higher than the non-Thai ones as displayed in Figure 4.

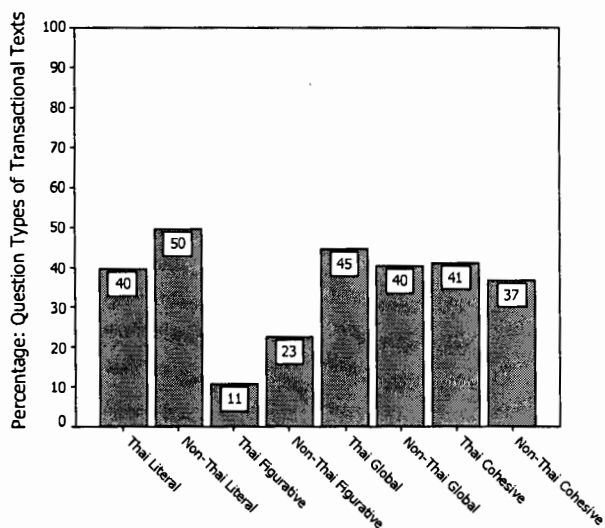


Figure 4 Percentage correct for each question type Thai and non-Thai transactional texts

According to one model of the reading process, literal and figurative questions relate to the bottom-up section which depends upon the small units although larger units may also be involved. Conversely, global and cohesive questions are part of the top-down category in which the large units are decisive (Cohen, 1994a, 213-214; Dubin, Eskey, & Grabe, 1986, 11-13; Paran, 1997, 1-3).

In relation to Figure 4, the scores of bottom-up questions in the Thai text are lower than for the non-Thai text which those of top-down questions are reversed as illustrated in Figure 5.

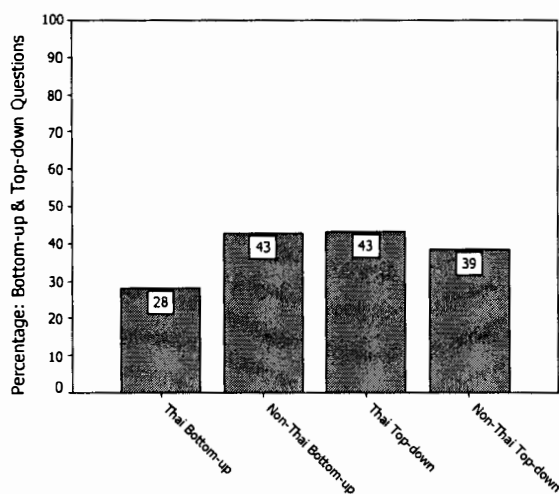


Figure 5 Percentage correct of bottom-up and top-down questions for each text, transactional texts

When put together as shown in Figure 6, total scores for both texts of top-down questions are higher than the scores of bottom-up questions and both are lower than 50%.

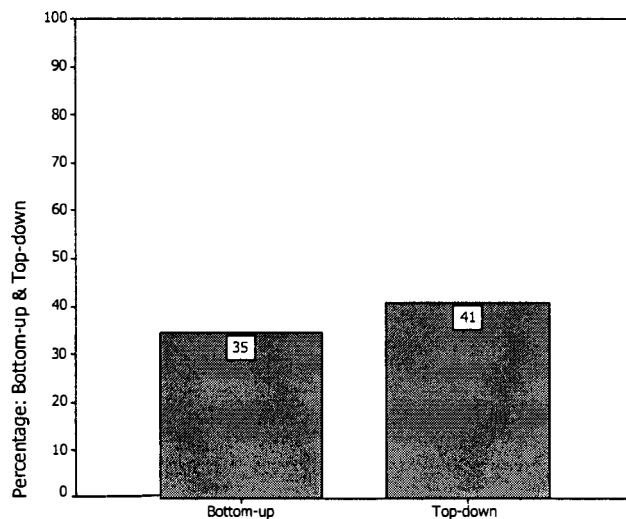


Figure 6 Percentage correct of bottom-up and top-down questions of transactional texts

As indicated in Figures 3 and 4, 5 and 6, even though the scores of literal questions are the highest ones, the students still have major problems with figurative questions which can be regarded as being related to the operation of bottom-up processes. Students obtain very low scores with figurative questions in both the Thai and non-Thai texts. Therefore, the means for bottom-up processes are lower than those of top-down processes in transactional texts. However, when reading the Thai context text the students gain higher scores for top-down processes with both global and cohesive questions.

The results indicate that student reading skills need to be enhanced for transactional texts, especially with the meaning of figurative language found in both Thai and non-Thai context texts. However, attention should not be confined to this area but needs widening to cover literal, global and cohesive areas because the scores for these questions are also quite low.

4.4 Strategies related to scores and question types

After answering each open-ended question in the reading comprehension task 1, transactional texts, the students were asked to write down the reasons for selecting the answer that they gave for each question. In addition, soon after completing the task for each text, the students engaged in a retrospective interview which was concerned with the strategies used to make a decision for each answer. The strategies connected with the use of Thai from both the open-ended questions and the interviews are analysed here and the results are displayed in tables and text.

4.4.1 Strategies of using Thai

From the task and the interview, it appears that students access their own language to help them comprehend transactional texts and in doing so use several strategies. Statements about these strategies are compacted into eight strategies as follows:

S1 to translate a word or a phrase itself

S2 to examine or think about the context of words or phrases or guess the meaning from context

S3 to understand the meaning of the sentence or find a reason

S4 to confirm understanding about the sentence (*not found in transactional texts*)

S5 to compare the English with the Thai grammar by using formal schema

S6 to access or find the reader's ideas by using content schema

S7 to construct or formulate ideas

S8 to summarise ideas

S0 no use of Thai

Details about the strategies used for comprehending transactional texts can be seen as in the following sample statements from the students, transcribed from the retrospective interviews (all names in the transcript have been changed to keep identities confidential). In each case the strategy and the type of question in brackets are mentioned first followed by an extract from the interview.

Example 1

S1: *to translate a word or a phrase itself*

(From Task 1 Text 1: Bangkok, Question 8, Figurative Question)

Question: *What does the word “houses” in line 12 mean?*

Reviewer: *How did you get the meaning of the word “houses” in the text?*

S08H : *I translated it into Thai.*

Reviewer: *Why did you translate it into Thai?*

S08H : *Because when I translated the word into Thai, it made me understand its meaning easily.*

Example 2

S1: *to translate a word or a phrase itself*

(From Task 1 Text 2: Wellington, Question 5, Literal Question)

Question: *What is the meaning of “the unified city” in line 6?*

Reviewer: *How did you get the meaning of this phrase from the text?*

S07G : *I translated this phrase into Thai.*

Reviewer: *Why?*

S07G : *When I translated the phrase into Thai, it made me understand the text easily.*

Example 3

S2: *to examine or think about the context of words or phrases or guess the meaning from context*

(From Task 1 Text 1: Bangkok, Question 6, Literal Question)

Question: *What is the meaning of “other outlying areas” in line 7?*

Reviewer: *How did you get the answer?*

S17Q : *I didn't know the meaning of the phrase “other outlying areas” but I tried to think in Thai. I knew the word “out” so I tried to guess the meaning of this phrase from this word and context. It helped me guess the meaning of the phrase.*

Example 4

S2: *to examine or think about the context of words or phrases or guess the meaning from context*

(From Task 1 Text 1: Bangkok, Question 4, Literal; Question)

Question: *What is the meaning of “the original city” in line 5?*

Reviewer: *How did you get the meaning of the phrase “the original city” in the text?*

S12L: *I noticed from the surrounding words or context and then guessed the meaning of this phrase.*

Example 5

S3: *to understand the meaning of the sentence or find a reason*

(From Task 1 Text 2: Wellington, Question 2, Global Question)

Question: *According to the passage, what had happened to Wellington between 1826- 1865?*

Reviewer: *How did you get this answer?*

S01A: *I read from the text and tried to think in Thai. I tried to find out the reason and then I could find it. I could understand the sentence easily by thinking in Thai instead of English.*

Example 6

S3: *to understand the meaning of the sentence or find a reason*

(From Task 1 text 2: Wellington, Question 3, Global Question)

Question: *Why was the city named Wellington?*

Reviewer: *How did you get the answer of this question?*

S07G: *When I read the text I thought in Thai. Thai helped me understand the text so I could find the answer easily. Thai also helped me take out the important part from the text and then I stored it in Thai in my brain. It helped me remember the text better than if I stored it in English.*

S4: *to confirm the reader understands about the sentence (not found in transactional texts)*

Example 7

S5: *to compare the English with Thai grammar by using formal schema*

(From Task 1 Text 1: Bangkok, Question 9, Cohesive Question)

Question: *The word “it” in line 2 refers to...*

Reviewer: *How did you know that the word “it” referred to the word “Bangkok”?*

S19S : *When I thought about the meaning of the pronoun reference “it”, I compared the English sentence with the Thai sentence so I could find the reference of the pronoun “it” in the text.*

Example 8

S5: *to compare the English with the Thai grammar by using formal schema*

(From Task 1 Text 1: Bangkok, Question 4, Literal Question)

Question: *What is the meaning of “original city” in line 5?*

Reviewer: *How did you get the meaning of the phrase “the original city”?*

S03C : *I compared the English structure with the Thai structure. For English structure, an adjective should be before a noun but for Thai structure, an adjective follows a noun.*

Example 9

S6: *to access or find the reader’s ideas by using content schema*

(From Task 1 Text 1: Bangkok, Question 1, Global Question)

Question: *According to the passage, how did Bangkok become Krung Thep Mahanakhon or Bangkok Metropolitan City?*

Reviewer: *How did you get the answer about the history of Bangkok?*

S18R : *I’ve known about Bangkok. I have knowledge about the history of Bangkok because I studied Thai history and read from books.*

Reviewer: *Did the previous knowledge about Bangkok help you understand the text?*

S18R : *Yes, very much.*

Example 10

S6: to access or find the reader's ideas by using content schema

(From Task 1 Text 1: Bangkok, Question 1, Global Question)

Question: According to the passage, how did Bangkok become Krung Thep Mahanakhon or Bangkok Metropolitan City?

Reviewer: How did you get the answer?

S17Q : I used my previous knowledge about Bangkok to answer this question?

Reviewer: Why?

S17Q : My previous knowledge about the background of Bangkok helped me understand the text easily and I could answer the question better.

Example 11

S7: to construct or formulate ideas

(From Task 1 Text 2: Wellington, Question 1, Global Question)

Question: What is the location of Wellington?

Reviewer: How did you get the answer for this question?

S17Q : I thought in Thai.

Reviewer: Why did you think in Thai?

S17Q : Because Thai helped me much, especially with unfamiliar context text as Wellington. It helped me imagine and formulate ideas about the text for answering the question.

Example 12

S7: to construct or formulate ideas

(From Task 1 Text 1: Bangkok, Question 1, Global Question)

Question: According to the passage, how did Bangkok become Krung Thep Mahanakhon or Bangkok Metropolitan City?

Reviewer: How did you get the answer?

S18R : When I read the text and I didn't understand, I tried to translate into Thai and then reconstructed the sentence into Thai for understanding.

Example 13

S8: to summarise ideas

(From Task 1 Text 2: Wellington, Question 2, Global Question)

Question: According to the passage, what had happened to Wellington between 1826- 1865?

Reviewer: How did you get the answer about the events that happened to Wellington between 1826-1865?

S16P : I tried to summarise the important aspects from the texts in Thai before answering the question.

Example 14

S8: to summarise ideas

(From Task 1 Text 2: Wellington, Question 2, Global Question)

Question: According to the passage, what had happened to Wellington between 1826- 1865?

Reviewer: How did you get the answer about the events that happened to Wellington between 1826-1865?

S04D : Many events happened at that time so I tried to summarise my ideas into Thai.

Example 15

S0: no use of Thai to assist comprehension

(From Task 1 Text 1: Bangkok, Question 10, Cohesive Question)

Reviewer: Did you think in Thai to find out the answer for the relative pronoun "which"?

S10J : No.

Reviewer: Why didn't you think in Thai for finding the answer?

S10J : Because I know the structure of the relative clause so I didn't think in Thai.

Example 16

S0: no use of Thai to assist comprehension

(From Task 1 Text 2: Wellington, Question 8, Cohesive Question)

Question: The word “that” in line 3 refers to...

Reviewer: How did you get the answer?

S02B : *I read from the text.*

Reviewer: Did you think in Thai?

S02B : *No, I didn't. I thought in English because I could find the answer in the text. I've known this structure so I didn't need to think in Thai.*

In the case of reading comprehension transactional texts, some students report using Thai to assist their reading but other students report resorting to Thai only when needed. The results are displayed in Figures 7 and 8.

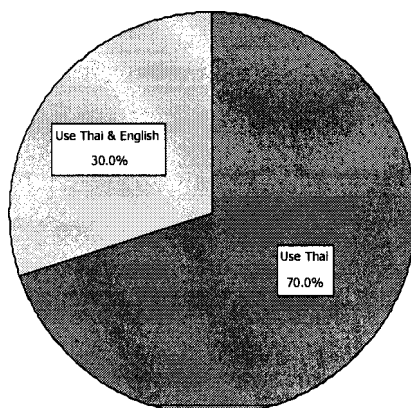


Figure 7 Language usage, the Thai context transactional text

Figure 7 shows that seventy percent of the students translate the text and their ideas about the questions into Thai to support their comprehension of the Thai context text whereas the other thirty percent use both Thai and English according to the situation.

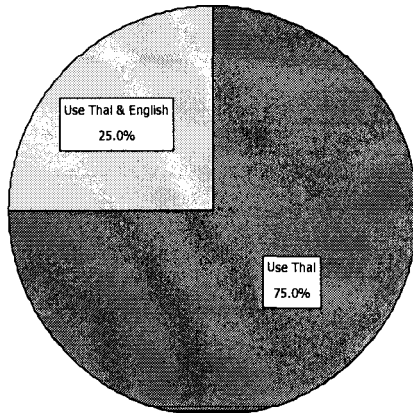


Figure 8 Language usage, the non-Thai context transactional text

Figure 8 shows that seventy-five percent of the students report using strategies to facilitate their comprehension for the non-Thai context transactional text whereas twenty-five percent mention a mixed language use according to need.

In this study, the students sometimes record using more than one strategy while reading. Hence a crosstabulation for multiple responses by means of the SPSS program was used to analyse the relationship between the strategies of using Thai while reading related to the student groups for each strategy. The results are reported based on the numbers of responses for using each strategy.

In the case of the Thai context transactional text, Bangkok, almost all students use the Thai language to assist their understanding while reading the text. Six of the strategies are used for the Thai context text that is excepting confirming the reader understands about the sentence and summarising ideas. Of these, nearly half of all responses indicate the students use Thai to examine or think about the context of words or phrases or guess the meaning from context, while only about fifteen percent of the respondees are using of Thai to construct or formulate their ideas. The percentage using content schema to access ideas is slightly lower than with the preceding strategy. The number of responses for using Thai to translate the word or phrase is even smaller and a little higher than that for using Thai to understand the meaning of the whole sentence or to find a reason. Only a few admit using Thai formal schema to compare the English to the Thai grammar and the number avoiding using Thai is similar. The results are

displayed in Table 6 where the frequency column refers to number of times a strategy is mentioned and the percentage column shows percentage of the responses.

Table 6 Strategies of Thai usage for the Thai context transactional text

<u>Strategies</u>	<u>Frequency</u>	<u>Percentage</u>
S2 Examine	96	40.2
S7 Construct Ideas	36	15.1
S6 Content schema	35	14.6
S1 Translate	30	12.6
S3 Understand	26	10.9
S5 Formal schema	7	2.9
S0 No use of Thai	9	3.8
Total	239	100.0

When the students are divided into three groups based on their performance in this task, low, medium and high, the strategies of using Thai are slightly different from Table 6. Thai usage to examine or think about the context of words or phrases or guess the meaning from context and to construct and formulate ideas are the major strategies for the students in all groups for Thai context transactional text. The other major strategy for the students in the low and the high groups is the usage of Thai content schema. Besides these, the next most important strategy for the students in the medium group is to translate the word or phrase itself whereas this strategy is a minor strategy for the students in the low and the high groups. At the opposite end of the scale, the usage of Thai formal schema and the usage of Thai to understand the meaning of the sentence or find a reason are minor strategies for using Thai for the students in all groups. In addition, only a few of the students in the low and the high groups are able to avoid the use of Thai to assist their understanding. The results are shown in Table 7.

Table 7 Percentage of Thai usage for each group, the Thai context transactional text

<u>Strategies</u>	<u>Score Groups</u>			<u>Percentage</u>
	<u>Low</u>	<u>Medium</u>	<u>High</u>	
S2 Examine	7.9	12.6	19.7	40.2
S7 Construct Ideas	5.9	5.4	3.8	15.1
S6 Content Schema	5.4	4.6	4.6	14.6
S1 Translate	4.6	6.3	1.7	12.6
S3 Understand	4.2	3.8	2.9	10.9
S5 Formal Schema	.0	2.1	.8	2.9
S0 No use of Thai	1.7	.0	2.1	3.8
Total	29.7	34.7	35.6	100.0

For the non-Thai context text, Wellington, all students report using Thai to support their comprehension while reading. Almost all strategies, except the strategy of confirming the reader understands the sentence, are used. Around one-third of the students' responses relate to the usage of Thai to examine or think about the context of words or phrases or guess the meaning from context. The second most frequent strategy is the usage of Thai to understand the meaning of the sentence or find a reason. The other two important strategies are those to translate the word or phrase itself and to construct ideas. Only a few use the strategies of summarising the students' ideas or using their formal schema to compare the English to the Thai grammar. In a similar way to the preceding strategies, in only a few instances do students not use Thai for comprehending the text. The results are displayed in table as shown in Table 8.

Table 8 Strategies of Thai usage for the non-Thai context transactional text

<u>Strategies</u>	<u>Frequency</u>	<u>Percentage</u>
S2 Examine	77	35.3
S3 Understand	43	19.7
S1 Translate	36	16.5
S7 Construct Ideas	29	13.3
S8 Summarise	12	5.5
S5 Formal schema	10	4.6
S0 No use of Thai	11	5.0
Total	218	100.0

When divided into three groups, low, medium and high, the students in all groups reveal the use of the same major strategies, that is, for examining or thinking about the context of words or phrases or guessing the meaning from context and for understanding the meaning of the sentence or finding the reason. The other major strategy for the medium and the high groups is the strategy of using Thai for translating the word or the phrase itself whereas this one is a minor strategy for the low group. Another major strategy for the low and the medium groups is using Thai for constructing or formulating ideas. On the other hand, the minor strategies of all groups are the strategies of using Thai formal schema to compare the English with the Thai grammar and using Thai for summarising ideas. The other minor strategy of the high group is the usage of Thai to construct or formulate ideas. However, a few in the medium and the high groups disregard the strategy of using Thai to facilitate their understanding and slightly more students in the low group avoid using those strategies. The results are shown in Table 9.

Table 9 Percentage of Thai usage for each group, the non-Thai context transactional text

Strategies	Score Groups			Percentage
	Low	Medium	High	
S2 Examine	7.3	10.1	17.9	35.3
S3 Understand	6.0	8.7	5.0	19.7
S1 Translate	4.1	6.0	6.4	16.5
S7 Construct Ideas	5.0	6.0	2.3	13.3
S8 Summarise	1.4	2.3	1.8	5.5
S5 Formal Schema	2.8	1.8	.0	4.6
S0 No use of Thai	3.2	1.4	.5	5.0
Total	29.8	36.2	33.9	100.0

The results from Tables 6, 7, 8 and 9 point to the fact that most of the students use Thai to assist their understanding for both transactional texts. The top most strategy for both texts is the same one that is using Thai to examine or think about the context of word or phrase or to guess the meaning from context. Similarly, the most infrequent strategy for both texts is the same, the strategy of using Thai formal schema to compare the English with the Thai grammar.

Likewise, the students in all groups, low, medium and high use the same major strategy, the usage of Thai to examine or think about the context of word or phrase or to guess the meaning from context, for both texts. A few students in all groups use Thai formal schema for both texts except the low group for the non-Thai context text using Thai for summarising ideas. Moreover, only a few students avoid the use of Thai altogether.

These results show that the students usually use the Thai language to support their comprehension of transactional texts, especially the strategy of using Thai to examine or think about the context of word or phrase or to guess the meaning from context.

When the use of Thai between both texts in the high group is compared, it is apparent that the students use the same top most strategy, the use of Thai to examine or think about the context of words or phrases or guess the meaning from context, for both texts but the responses are slightly higher for the Thai text than the non-Thai one. Several responses for the strategy of using content schema reveal its usage in the Thai text but there is no evidence for this strategy in the non-Thai one. Conversely, the strategy of translating the word or phrase itself is used as the other major strategy for the non-Thai

text but it is a minor one in the Thai text. A few instances of using Thai formal schema can be seen in only the Thai text whereas a few instances of using Thai to summarise ideas can be seen in only the non-Thai one. The avoidance of using Thai appears a little for both texts but is slightly higher for the Thai one.

In addition, the frequency of the strategic use for the Thai transactional text is 1.15 times per question and 1.04 times per question for the non-Thai one. This means that the students tend to use more than one strategy to answer each question.

4.4.2 Strategies and scores

The preceding part shows the results about the frequency of the strategies for transactional texts but does not clarify the relationship between the usage of strategies and overall scores. Therefore, the strategies related to scores and strategies and their connection to better answers are reported in this part.

4.4.2.1 Strategies related to scores

According to the marking system, each question is marked out of 2. Where the student is able to comprehend the text and answer the question with at least a reasonable degree of understanding, he/she is likely to gain a score of 2, 1.5 or 1. Conversely, if he/she is having difficulty with comprehension, his/her mark will be .5 or 0. As it is intended to compare strategies used with scores, the scores will be divided into these two sections as indicated. In this way an identification can be made of what strategies are used for producing the better answers.

The next table shows scores and level of comprehension gained for each answer for the Thai context transactional text. Despite the fact that students use Thai to assist their understanding, slightly more than half of them still show difficulties with comprehension for this text, whilst slightly less than fifty percent of them show their abilities to comprehend the text. The results are displayed in Table 10.

Table 10 Percentage for high/low scores, the Thai context transactional text

<u>Score</u>	<u>Frequency</u>	<u>Percentage</u>	<u>Comprehension</u>
0	96	48.0	Show non-comprehension
0.5	13	6.5	Show non-comprehension
1	40	20.0	Show comprehension
1.5	13	6.5	Show comprehension
2	38	19.0	Show comprehension
Total	200	100.0	

For the non-Thai context text, the percentages for showing abilities to comprehend the text are slightly higher than those for having difficulties with comprehension the text. The results are displayed in Table 11.

Table 11 Percentage for high/low scores, the non-Thai context transactional text

<u>Score</u>	<u>Frequency</u>	<u>Percentage</u>	<u>Comprehension</u>
0	88	44.0	Show non-comprehension
0.5	10	5.0	Show non-comprehension
1	42	21.0	Show comprehension
1.5	12	6.0	Show comprehension
2	48	24.0	Show comprehension
Total	200	100.0	

There are both positive and negative results associated with the use of Thai to implement individual strategies to comprehend the texts. Some students attain high scores from this usage which show their abilities to comprehend the text but some gain very low scores or even zero which show their non-comprehension.

For the Thai context text, slightly more than half of the items where students use the whole range of strategies gain low scores whereas the others obtain high scores. When looking at scores for each strategy, it is apparent that the percentages of the high scores are in fact slightly lower than those of the low scores. Moreover, for the few students who do not use Thai, there is no indication that the non-use of Thai produced higher scores although the scores are a little more positive. The results displayed in Table 12 fail to indicate any associated advantage from the use of particular strategies.

Table 12 Strategies of Thai usage related to scores, the Thai context transactional text

<u>Strategies</u>	<u>Low Score (0-5 Marks)</u>	<u>High Score (1- 2 Marks)</u>	<u>Total</u>
S2 Examine	21.4	18.8	40.2
S7 Construct Ideas	7.9	7.2	15.1
S6 Content Schema	7.7	6.9	14.6
S1 Translate	7.5	5.1	12.6
S3 Understand	6.5	4.4	10.9
S5 Formal Schema	1.8	1.1	2.9
S0 No use of Thai	1.7	2.0	3.7
Total	54.5	45.5	100.0

For the non-Thai context text, the results show similar percentages of the low and the high scores, percentages of the former being slightly lower than the latter. When comparing percentages of the two types of scores for each strategy, it appears that the respondees who use Thai to translate the words or phrases and to examine or think about the context of words or phrases or guess the meaning from context attain slightly higher percentages of high scores than low ones. With the other strategies used, the respondees indicate higher percentages of low scores than high scores or equivalent percentages for both types of scores. Moreover, those few students who do not use Thai at all are not able to gain high scores, although the scores are a little more positive in this case. The results are illustrated in Table 13.

Table 13 Strategies of Thai usage related to scores, the non-Thai context transactional text

<u>Strategies</u>	<u>Low Score (0-5 Marks)</u>	<u>High Score (1- 2 Marks)</u>	<u>Total</u>
S2 Examine	17.2	18.1	35.3
S3 Understand	9.9	9.8	19.7
S1 Translate	7.6	8.9	16.5
S7 Construct Ideas	6.7	6.7	13.4
S8 Summarise Ideas	2.6	2.9	5.5
S5 Formal Schema	2.6	2.0	4.6
S0 No use of Thai	2.5	2.5	5.0
Total	49.0	51.0	100.0

The results from Tables 10, 11, 12 and 13 indicate that the major strategy of using Thai to examine or think about the context of the word or phrase or to guess the meaning from context affects the scores in both positive and negative ways. For the Thai context text, it appears that slightly lower than half of the responses for overall as well as individual strategy indicate the ability to comprehend the text whereas the others indicate non-comprehension. For the non-Thai context text, slightly higher than half of all responses are given the high scores. However, the higher percentages of high scores are linked with the strategies of using Thai to examine or think about the context of the word or phrase or to guess the meaning from context and using Thai to translate the word or phrase itself but other strategies attract a higher percentage of low scores. This means that some strategies of using Thai are moderately associated with students who obtain higher scores for transactional texts. Conversely, the strategy of not-using Thai has not been shown to have a positive effect.

4.4.2.2 Strategies related to better answers

Results to date have shown strategy usage is not always associated with a student's comprehension. As a consequence, the term strategy will in this section refer only to useful strategies which affect the learners such a way that they are linked to the production of better answers with the scores of one, one and a half and two. Some students use only one strategy to gain scores but some use double or multiple strategies to attain scores.

Examination of the Thai transactional text scores reveals that one-fourth of better answers are influenced by the strategy of using Thai to examine or think about the context of words or phrases or guess the meaning from context. The other important strategies linked to higher scores are the strategies of using Thai to translate the word or phrase itself, to understand the meaning of the sentence or find a reason, to access or find the reader's ideas by using content schema and to construct or formulate ideas. In only one percent of these cases do students use Thai formal schema to compare the English with the Thai grammar.

Nonetheless, some students use multiple strategies for producing better scores. An examination of the leading multiple usages reveals that in all of these cases the students use content schema (S6) combined with other strategies that is S6+ S2 (to use content schema to access or find the reader's ideas and to examine or think about the context of words or phrases or guess the meaning from context), S6+S3 (to use content schema to access or find the reader's ideas and to understand the meaning of the sentence or find a reason) and S6+S7 (to access or find the reader's ideas by using content schema and to construct or formulate ideas). The other useful multiple strategies are the combination of the usage of Thai to construct or formulate ideas (S7) and one other that is S7+S2 (to construct or formulate ideas and to examine or think about the context of words or phrases or guess the meaning from context), and S7+S3 (to construct or formulate ideas and to understand the meaning of the sentence or find a reason) and S7+S6 (to construct or formulate ideas and to access or find the reader's ideas by using content schema). For those who gave better answers there are few who do not use any strategy. The results are shown in Table 14.

Table 14 Strategies related to better answers, the Thai context transactional text

Single Strategy Use	Usage	Percentage
S2 - to examine or think about the context of words or phrases or guess the meaning from context		28.4
S6 - to use content schema to access or find the reader's ideas		11.3
S1 - to translate the word or phrase itself		10.1
S7 - to construct or formulate ideas		10.1
S3 - to understand the meaning of the sentence or find a reason		9.0
S5 - to use Thai formal schema to compare the English with the Thai Grammar		1.3
S0 - no reference to strategy use		2.2
Multiple Strategy Use		
S6+S7 - to use content schema to access or find the reader's ideas and to construct or formulate ideas		7.8
S6+S3 - to use content schema to access or find the reader's ideas and to understand the meaning of the sentence or find a reason		5.6
S6+S2 - to use content schema to access or find the reader's ideas and to examine or think about the context of words or phrases or guess the meaning from context		3.4
S7+S2 - to construct or formulate ideas and to examine or think about the context of words or phrases or guess the meaning from context		3.4
S7+S3 - to construct or formulate ideas to understand the meaning of the sentence or find a reason		2.2
S7+S1 - to construct or formulate ideas and to translate the word or phrase itself		1.3
S5+S7 - to use Thai formal schema to compare the English with the Thai grammar and to construct or formulate ideas		1.3
S5 +S1 - to use Thai formal schema to compare the English with the Thai grammar and to translate the word or phrase itself		1.3
S5+S2 - to use Thai formal schema to compare the English with the Thai grammar and to examine or think about the context of words or phrases or guess the meaning from context and		1.3
	Total	100.0

When looking at the non-Thai text, the topmost single strategy for the better answers is the strategy of using Thai to examine or think about the context of words or phrases or guess the meaning from context. It appears in around one-fourth of the strategies for the better answers. The other major strategies which have an effect on the better answers are those of using Thai to understand the meaning of the sentence or find a reason and to translate the word or phrase itself, respectively. Others which are involved in the better answers, are those of using Thai to construct or formulate ideas and using Thai formal schema to compare the English with the Thai grammar. As with the Thai text, some students use multiple strategies to attain high scores. The most important multiple strategy which influences the better answers is the combination of using Thai to construct or formulate ideas (S7) and other strategies that is S7+ S3 (to construct or formulate ideas and to understand the meaning of the sentence or find a reason) and S7+S8 (to construct or formulate ideas and to summarise ideas). The results are displayed in Table 15.

Table 15 Strategies related to better answers, the non-Thai context transactional text

Single Strategy Use	Usage Percentage
S2 - to examine or think about the context of words or phrases or guess the meaning from context	26.6
S3 - to understand the meaning of the sentence or find a reason	21.7
S1 - to translate the word or phrase itself	20.6
S7 - to construct or formulate ideas	6.9
S5 - to use Thai formal schema to compare the English with the Thai Grammar	4.9
S8 - to summarise ideas	2.0
S0 - no reference to strategy use	4.0
Multiple Strategy Use	
S7+S8 - to construct or formulate ideas and to summarise Ideas	4.9
S7+S3 - to construct or formulate ideas and to understand the meaning of the sentence or find a reason	3.0
S7+S2 - to construct or formulate ideas and to examine or think about the context of words or phrases or guess the meaning from context	0.9
S5+S7 - to use Thai formal schema to compare the English with the Thai grammar and to construct or formulate ideas	0.9
S5+S2 - to use Thai formal schema to compare the English with the Thai grammar and to examine or think about the context of words or phrases or guess the meaning from context	0.9
S8+S2 - to summarise ideas and to examine or think about the context of words or phrases or guess the meaning from context	0.9
S8+S3 - to summarise ideas and to understand the meaning of the sentence or find a reason	0.9
S7+S8+S2- to construct or formulate ideas, to summarise ideas and to examine or think about the context of words or phrases or guess the meaning from context	0.9
Total	100.0

Tables 14 and 15 indicate the fact that the topmost strategy, which has an effect on gaining high scores in both transactional texts, is that of using Thai to examine or think about the context of words or phrases or guess the meaning from context. The other major strategies for the better answers are those to translate the word or phrase itself and to understand the meaning of the sentence or find a reason. The strategy of using Thai formal schema has slightly greater effects for the non-Thai text than for the Thai one, whereas that of using content schema is more important for the Thai one. The strategy of using Thai to construct or formulate ideas also seems to have a beneficial influence as well, but more so in the Thai text. In addition, multiple strategies are useful for students when they are not satisfied with using only one strategy to find the correct answers. The important multiple strategies are the combination of using content schema and other strategies and the combination of using Thai to construct or formulate ideas and other strategies for the Thai context text, whereas the combination of using Thai to construct or formulate ideas is the important one for the non-Thai context text. However, when compared with the frequency of using these strategies in Tables 6 (see page 79) and 8 (see page 80), it is apparent that the number of better answers from using these strategies is still low. The production of better answers is not guaranteed by strategy use.

4.4.3 Strategies and question types

From the task and the interviews, it appears that strategies are used differently according to question type categories, that is, bottom-up or top-down. Top-down questions comprise global and cohesive questions whereas bottom-up questions comprise literal and figurative questions. The next aspect deals with the relationship between strategies and question types first with regard to the separate texts then an overview is given.

For the Bangkok text, the major strategies for top-down questions are the use of Thai to examine or think about the context of word or phrase or guess the meaning from context and the use of content schema. The third and the fourth most frequent strategies are the use of Thai to understand the meaning of the sentence or find a reason and to construct or formulate ideas. On the other hand, minor strategies are the use of Thai formal schema and the use of Thai to translate the word and phrase itself. In addition, there are a few responses for the non-use of Thai. The results are illustrated in Table 16.

Table 16 Strategies used in top-down questions, the Thai context transactional text

<u>Strategies</u>	<u>Frequency</u>	<u>Percentage</u>
S2 Examine	34	26.6
S6 Content schema	32	25.0
S3 Understand	25	19.5
S7 Construct Ideas	22	17.2
S1 Translate	6	4.7
S5 Formal schema	4	3.1
S0 No use of Thai	5	3.9
Total	128	100.0

For the bottom-up questions of the Thai context text, the foremost strategy is also the use of Thai to examine or think about the context of word or phrase or guess the meaning from context. The next most frequent strategies are those to translate the word or phrase itself and to construct or formulate ideas. The minor strategies are the use of Thai to understand the meaning of the sentence or find a reason, the use of Thai formal and the use of content schema. Additionally, a few students fail to report the use of any strategy. The results are displayed in Table 17.

Table 17 Strategies used in bottom-up questions, the Thai context transactional text

<u>Strategies</u>	<u>Frequency</u>	<u>Percentage</u>
S2 Examine	62	55.9
S1 Translate	24	21.6
S7 Construct Ideas	14	12.6
S5 Formal schema	3	2.7
S6 Content schema	3	2.7
S3 Understand	1	.9
S0 No use of Thai	4	3.6
Total	111	100.0

When attention is moved to the non-Thai text, again the strategy of examining or thinking about the context of a word or phrase or guessing the meaning from context is the topmost strategy for top-down questions. The use of Thai to understand the meaning of the sentence or find a reason is another major strategy as well. The next most frequent strategy is the use of Thai to construct or formulate ideas. Minor strategies are those to translate the word or phrase itself, to use the Thai formal schema and to summarise ideas. In addition, there are a few responses indicating the non-use of any strategy. The results are shown in Table 18.

Table 18 Strategies used in top-down questions, the non-Thai context transactional text

<u>Strategies</u>	<u>Frequency</u>	<u>Percentage</u>
S2 Examine	40	29.0
S3 Understand	40	29.0
S7 Construct	26	18.8
S8 Summarise	12	8.7
S5 Formal schema	7	5.1
S1 Translate	4	2.9
S0 No use of Thai	9	6.5
Total	138	100.0

Likewise, the strategy of using Thai to examine or think about the context of word or phrase or guess the meaning from context is the topmost strategy for bottom-up questions in the non-Thai context text. Another major one is the use of Thai to translate the word or phrase itself. On the other hand, the use of Thai to understand the meaning of the sentence or find a reason, to construct or formulate ideas and the use of Thai formal schema are the minor strategies for these bottom-up questions. Besides, only a few responses avoid mentioning strategies. The results are shown in Table 19.

Table 19 Strategies used in bottom-up questions, the non-Thai context transactional text

<u>Strategies</u>	<u>Frequency</u>	<u>Percentage</u>
S2 Examine	37	46.3
S1 Translate	32	40.0
S3 Understand	3	3.8
S5 Formal schema	3	3.8
S7 Construct Ideas	3	3.8
S0 No use of Thai	2	2.5
<u>Total responses</u>	<u>80</u>	<u>100.0</u>

From Tables 16, 17, 18 and 19, the combined results point to the fact that the strategy of using Thai for examining or thinking about the context of word or context or guessing the meaning from context is the top most strategy for transactional texts for both top-down and bottom-up questions. The strategy of using content schema is prominent only for top-down questions in the Thai context text but is not an important strategy for bottom-up questions in the same text as well as for both top-down and bottom-up questions in the non-Thai one. The strategy for understanding the meaning of the sentence or finding a reason is the major strategy for top-down questions in the non-Thai context text as well as an important one for top-down questions in the Thai one. The strategy for constructing and formulating ideas is also an essential one for top-down questions in both texts whereas it is an unimportant one for bottom-up questions in the Thai context text and a minor strategy in the non-Thai one. Besides, the strategy for translating the word or phrase itself is the second most frequently use for only bottom-up skills in both texts but it is infrequent for top-down skills. The strategy of summarising ideas is used for only top-down skills in the non-Thai context text. Non-Thai usage is rarely found for the comprehension of transactional texts.

In addition, the frequency of the strategic use for top-down questions of the Thai transactional text is 1.23 times per question and 1.07 times per question for bottom-up questions. For the non-Thai context texts, it appears that the students use Thai to assist their answers 1.07 times per question for top-down questions and 0.97 time per question for bottom-up ones. This means that the students on the average use at least one strategy per question with a slightly lower figure for the non-Thai context text.

4.5 Problems and question types

From reading comprehension task 1, transactional texts, it is apparent that the students experienced many problems in trying to comprehend these texts. In this part, the problems from the completed task as well as the problems related to student groups based on their English competency are reported.

4.5.1 Problems

From the responses to the comprehension tests in the task, it appears that the students have several problems when reading both types of transactional text. The

problems found from reading transactional texts and described in the interview are categorised into four categories as follows:

General problems

P1 cannot understand the word(s) in the question or cannot find the answer

P2 can find the answer but cannot explain in his/her own words or exact quote

P3 can answer only part of the question

P4 uses content schema instead of reading

Grammar problems

P5 parts of speech

P6 recognising English word order i.e. adjective + noun

P7 problems with breaking up words into prefix / root

P8 problems with singular / plural (*not found in transactional texts*)

P9 problems with pronouns and possessive pronouns (*not found in transactional texts*)

P10 grammar problems with double, participial adjective

P11 problems with tenses

P12 grammar problem, about subject / verb agreement

P13 passive voice

P14 problems with verbs after preposition; participle / gerund (*not found in transactional texts*)

Problems with punctuation

P15 problems with apostrophe

P16 problems with phrase in apposition and relative clause between two commas

P17 punctuation; commas, semicolon

Problems with linkage

P18 conjunction

P19 problems with reference words; (personal, relative, possessive) pronouns

In this case, reading comprehension on transactional texts, the students sometimes have more than one problem for the same question. Therefore, the crosstabulation by means of SPSS program is used to analyse the problems found. The results are based on the numbers of responses for each problem as shown in Tables 20 and 21.

For the Thai context text, thirteen problems are found as obstacles for comprehending the text. At the top for this text is a general problem that the students cannot understand the word(s) in the question or cannot find the answer. This accounts for about one-third of the number of all responses. The second most frequent problem is also a general problem that the students can find the answer but cannot explain in their own words or they resort to an exact quote. The third most frequent problem is a grammar problem with subject/verb agreement, whereas the other major problem is one relating to linkage about references words. Problems with answering only part of the question, with using existing knowledge or content schema instead of being guided by the reading and with using word order are also found. On the other hand, minor problems mentioned are those with tenses, with parts of speech, with prefix/suffix, with passive voice, with apostrophes and with phrases in apposition or relative clauses between two commas. Moreover, around one-fifth of the respondents mention no problems. The results are presented in Table 20.

Table 20 Problems with the Thai context transactional text

<u>Problems</u>	<u>Frequency</u>	<u>Percentage</u>
<u>General Problems</u>		
P1 Can't understand word(s)	78	32.5
P2 Exact quote	30	12.4
P3 Answer only part	16	6.6
P4 Use content schema	10	4.1
<u>Grammar Problems</u>		
P12 Subject / verb agreement	24	10.0
P6 Word order	6	2.5
P11 Tenses	3	1.2
P5 Parts of speech	2	.8
P7 Prefix / suffix	1	.4
P13 Passive voice	1	.4
<u>Problems with Linkage</u>		
P19 Reference	22	9.1
<u>Problems with Punctuation</u>		
P15 Apostrophe "s"	1	.4
P16 Phrase in apposition	1	.4
<u>P0 No problem</u>	<u>46</u>	<u>19.2</u>
Total	241	100.0

For the non-Thai transactional text, Wellington, thirteen problems are found. In a similar way to the previous text, the foremost problem is a general problem that is the students cannot understand the word(s) in the question or cannot find the answer. This accounts for around one-fifth of the number of all responses. The second most frequent problem relates to linkage about reference words. The next most frequent problem is a general problem that the students can find the answer but cannot explain in their own words or resort to an exact quote. The other crucial problem is a grammar problem with double or participial adjectives. Problems with answering only parts of the question and with the use of the prefix/suffix are also fairly frequently mentioned. The other major problems are those with reference words and those that can find the answer but cannot explain in their own words or resort to an exact quote. The problems with double or participial adjectives and with answering only part of the question are also fairly frequently mentioned. A few responses related to problems with word order and with prefix and suffix. Minor problems are those with word order, with tenses, with passive voice, with phrases in apposition and relative clauses between two commas, with punctuation and with conjunctions. With this text, around one-fourth of the respondents mention having no problems. The results are illustrated in Table 21.

Table 21 Problems with the non-Thai context transactional text

<u>Problems</u>	<u>Frequency</u>	<u>Percentage</u>
<u>General Problems</u>		
P1 Can't understand word(s)	48	21.7
P2 Exact quote	30	13.5
P3 Answer only part	15	6.8
<u>Problems with Linkage</u>		
P19 Reference	35	15.8
P18 Conjunction	1	.5
<u>Grammar Problems</u>		
P10 Double / participial adjective	18	8.1
P7 Prefix / suffix	8	3.6
P6 Word order	2	.9
P11 Tenses	1	.5
P13 Passive voice	1	.5
<u>Problems with Punctuation</u>		
P16 Phrase in apposition	1	.5
P17 Punctuation, commas, semicolon	1	.5
P0 No problem	60	27.1
Total	222	100.0

The next tables show the relationship between the problems with the students in each group, low, medium and high. The crosstabulation for multiple responses by means of the SPSS program is used to analyse the relationship between these. For the Thai context text, it can be seen that all groups of the students have the same major problems which are general problems, that is the problem that the students cannot understand the word(s) in the question or cannot find the answer and the problem that they cannot explain in their own words or resort to an exact quote. The students in the low group show their weaknesses with the first issue more often than the other groups. Moving on from procedural matters to grammar, the students in the high and the medium groups report encountering a grammar problem with using subject/verb agreement more than those in the low group. The other important problem for the students in the medium and the low groups is a problem with linkage about using reference words. On the opposite end of the scale, a minor problem found in all groups of the students is a grammar problem with word order. For the students in the high group, other minor problems are those with using content schema instead of being guided by the reading and with using parts of speech. Other minor problems for the students in the medium group are those with prefix/suffix, with passive voice and with phrases in apposition and relative clauses between commas. For the students in the low group, minor ones are those with the use of content schema instead of being guided by the reading and with the apostrophe "s". In addition, the percentage of not having problems for the high group is the highest one while the low group it is the lowest. The results are shown in Table 22.

Table 22 Problems for each group of students, the Thai context transactional text

Problems	<u>Score Groups</u>			<u>Total</u>
	Low	Medium	High	
General Problems				
P1 Can't understand	12.9	10.0	9.6	32.5
P2 Exact quote	4.6	4.1	3.7	12.4
P3 Answer only part	1.2	2.5	2.9	6.6
P4 Use content schema	.8	2.5	.8	4.1
Grammar Problems				
P12 Subject/verb agreement	2.0	4.6	3.3	10.0
P6 Word order	.8	.8	.9	2.5
P11 Tenses	1.1	1.1	.0	1.2
P5 Parts of speech	.0	.0	.8	.8
P7 Prefix/suffix	.0	.4	.0	.4
P13 Passive voice	.0	.4	.0	.4
Problems with Linkage				
P19 Reference	2.6	5.2	1.3	9.1
Problems with Punctuation				
P15 Apostrophe "s"	.4	.0	.0	.4
P16 Phrase in apposition	.0	.4	.0	.4
P0 No problem	3.5	6.3	9.4	19.2
Total	30.0	38.3	32.7	100.0

Correspondingly, the topmost problem for the non-Thai context text is the same general matter namely that the students in all groups, low, medium and high, cannot understand the word(s) in the question or cannot find the answer. Problems with linkage about reference words and resorted to an exact quote is also a major problems for all groups, with prefix/suffix being a minor problem. For the students in the medium group, other minor problems reported are problems with word order, with tenses, with passive voice, with phrases in apposition and relative clauses between two commas, with punctuation, and with conjunctions but these problems are not mentioned for the low and the high groups. Moreover, the percentages of not having problems for the high and the medium groups are equal and slightly higher than for the low group. This may result from the smaller number of the students in the low group. The results are presented in Table 23.

Table 23 Problems for each group of students, the non-Thai context transactional text

Problems	Low	<u>Score Groups</u>		Total
		Medium	High	
General Problems				
P1 Can't understand	7.2	8.2	6.3	21.7
P2 Exact quote	4.1	4.1	5.3	13.5
P3 Answer only part	2.7	1.8	2.3	6.8
<u>Problems with Linkage</u>				
P19 Reference	5.0	4.5	6.3	15.8
P18 Conjunction	.0	.5	.0	.5
Grammar Problems				
P10 Participial adjectives	2.7	2.7	2.7	8.1
P7 Prefix/suffix	1.8	.9	.9	3.6
P6 Word order	.0	.9	.0	.9
P11 Tenses	.0	.5	.0	.5
P13 Passive voice	.0	.5	.0	.5
Problems with Punctuation				
P16 Phrase in apposition	.0	.5	.0	.5
P17 Punctuation, commas	.0	.5	.0	.5
P0 No Problem	6.7	10.2	10.2	<u>27.1</u>
Total	30.2	35.8	34.0	<u>100.0</u>

The results from Tables 20, 21, 22 and 23 indicate that the students in all groups have several problems which interfere with their understanding of transactional texts. The top most problem for both texts, the Thai and the non-Thai ones, is the same general problem. It is the problem that the students cannot understand the word(s) in the question or cannot find the answer. Likewise, this problem is also the top most one for students in all groups. Other major problems for the Thai one are the problems with the resort to an exact quote, with subject/verb agreement and with reference words whereas those with reference words and with the use of an exact quote are the other major ones for the non-Thai context text as well as those with double or participial adjectives. In addition, the students indicate a higher frequency for not admitting to problems for the non-Thai context text than the Thai one.

4.5.2 Problems and question types

In this study, the problems vary with question types of the texts, top-down and bottom-up. Therefore, this section is concerned with the relationship between problems and question types. The problems are distinguished into two question types, top-down and bottom-up.

4.5.2.1 Top-down problems

For the Thai context text, the results show that the foremost problem for top-down questions is a general problem with using exact quotes. The second frequent problem for this question type is the problem with linkage about reference words. The other considerable problems are general problems with answering only part of the question and with not understanding the word(s) in the question or not finding the answer. The problems with the use of content schema instead of being guided by the reading and with tenses are found occasionally. Only a few students experienced problems with apostrophe "s" and with relative clauses and phrases in apposition with two commas for this question type. Additionally, with around one-fifth of the respondents mention having no problems for top-down skills, the results are illustrated in Table 24.

Table 24 Top-down problems, the Thai context transactional text

<u>Problems</u>	<u>Frequency</u>	<u>Percentage</u>
<u>General Problems</u>		
P2 Exact quote	30	27.1
P3 Answer only part	14	12.6
P1 Can't understand word(s)	11	9.9
P4 Use content schema	7	6.3
<u>Problems with Linkage</u>		
P19 Reference	22	19.8
<u>Grammar Problems</u>		
P11 Tenses	3	2.7
<u>Problems with Punctuation</u>		
P15 Apostrophe "s"	1	.9
P16 Phrase in apposition	1	.9
P0 No problem	22	19.8
Total	111	100.0

For the non-Thai context text, the foremost problem of top-down questions for the non-Thai context text is the problem with linkage about reference words. The other major ones are general problems with using exact quotes, with not understanding the word(s) in the question or not finding the answer and with answering only part of the question. Only a few problems with tenses, with passive voice, with conjunctions and with relative clauses and phrases in apposition with two commas occasionally appear. Furthermore, slightly less than one-fourth of the respondents mention no problems. The results are displayed in Table 25.

Table 25 Top-down problems, the non-Thai context transactional text

Problems	Frequency	Percentage
Problems with Linkage		
P19 Reference	35	28.0
P18 Conjunction	1	.8
General Problems		
P2 Exact quote	30	24.0
P1 Can't understand word(s)	14	11.2
P3 Answer only part	12	9.6
Grammar Problems		
P11 Tenses	1	.8
P13 Passive voice	1	.8
Problems with Punctuation		
P16 Phrase in apposition	1	.8
P17 Punctuation, commas	1	.8
P0 No problem	29	23.2
<u>Total</u>	125	100.0

When compared, the results from Tables 24 and 25 point to the fact that the students have the same major problems for both texts with general problems about using exact quotes, answering only part of the question and not understanding the word(s) in the question or not finding the answer and a problem with linkage about using reference words. On the other hand, problems with tenses, relative clauses and phrases in apposition are minor ones for both texts. Besides, the problems with the use content schema instead of being guided by reading and with apostrophes are minor ones for the Thai context text while the problems with passive voice, with punctuation and with conjunction are minor in the case of the non-Thai one. Additionally, the students have fewer top-down problems for the non-Thai context text than for the Thai one.

4.5.2.2 Bottom-up problems

Students also show their weaknesses in relation to bottom-up skills with reading transactional texts. For the Thai context text, two categories of problems are found that is general problems and grammar problems. The foremost problem is a general problem with not understanding the word(s) in the question or not finding the answer. The second frequent problem is a grammar problem with subject/verb agreement. A few mention a problem with word order. Minor problems for bottom-up skills are problems with using content schema instead of being guided by reading, with answering only part of the question, with using parts of speech, with using prefix/suffix and with using passive voice. In addition, slightly lower than one-fifth of the respondents mention having no problems. The results are presented in Table 26.

Table 26 Bottom-up problems, the Thai context transactional text

<u>Problems</u>	<u>Frequency</u>	<u>Percentage</u>
<u>General Problems</u>		
P1 Can't understand word(s)	67	51.5
P4 Use content schema	3	2.3
P3 Answer only part	2	1.5
<u>Grammar Problems</u>		
P12 Subject / verb agreement	24	18.5
P5 Parts of speech	2	1.5
P6 Word order	6	4.6
P7 Prefix / suffix	1	.8
P13 Passive voice	1	.8
P0 No problem	24	18.5
Total	130	100.0

Likewise, the major problems for the non-Thai context text, two categories of problems are mentioned for bottom-up skills that is general problems and grammar problems. The foremost problem is a general problem with not understanding the word(s) in the question or not finding the answer and the second frequent problem is a grammar problem with using double/participial adjectives. The problems with prefix/suffix are less important for this question type. Besides, a few mention answering only part of the question and having difficulty with word order. The results are presented in Table 27.

Table 27 Bottom-up problems, the non-Thai context transactional text

Problems	Frequency	Percentage
General Problems		
P1 Can't understand word(s)	34	35.1
P3 Answer only part	3	3.1
Grammar Problems		
P10 Double/Participial adjectives	18	18.5
P7 Prefix / suffix	8	8.2
P6 Word order	2	2.1
P0 No problem	32	33.0
Total	97	100.0

The results from Tables 26 and 27 point to the fact that the students show some weaknesses about a general problem with the ability of understanding word(s) in the question or finding the answer for bottom-up skills in both texts. Grammar problems are also other major problems for this question type. The problem with subject/verb agreement is the prominent one for the Thai context text whereas that with double or participial adjectives is the essential one for the non-Thai context text.

4.6 Summary

This chapter reports the analysis of the relationship between the preference of text types and scores, text types and scores, strategies and question types, strategies and scores and question types and problems from reading transactional texts.

Around two-thirds of the students prefer the Thai context text whereas around one-fourth of them prefer the non-Thai one with a few preferring both, but the mean of the scores for the non-Thai one is slightly higher than the Thai one. The preference of text has a slightly positive effect on the preference of the non-Thai context text and the preference of both texts, but the scores for the Thai context text in relation to the Thai

text preference are not related in the same positive way. Therefore, we cannot conclude that there is a strong relationship between liking a text and scoring well for transactional texts. Furthermore, when a mixed factorial ANOVA was used to analyse the differences between the scores according to preference for transactional texts, no statistically significant differences were found ($p > .05$).

Although the scores for the non-Thai context text in all aspects, total task scores, question scores and sentence scores are slightly higher than the Thai one and the range of those scores is wider than the Thai one, no statistical differences were found ($p > .05$) when a paired sample T-test was used to analyse the differences of them. It needs to be said that total task scores, question scores and sentence scores are lower than fifty percent for each score type in both texts and the overall scores for the entire transactional task are lower than fifty percent as well. For the question types, the highest scores are those of literal questions whereas the lowest scores are those of figurative ones. Thus, the low scores for figurative questions have an effect on the low scores for bottom-up skills meaning that these are lower than top-down skills for transactional texts. In addition, a comparison of the scores for both texts reveals that the bottom-up scores for the Thai context text are lower than for the non-Thai one, but the reverse is the case for top-down scores.

In relation to the role the Thai language plays in reading transactional texts, seventy percent of the students always make strategic use of the Thai language to assist their comprehension for the Thai context text whereas the other thirty percent of them report using Thai according to their needs. For the non-Thai context text, seventy-five percent of the students mention using Thai to support their comprehension at all times when reading, whilst the remaining twenty-five percent report using Thai according to need.

For the frequency of the use of strategies to assist the student comprehension, it is apparent that the students tend to rely on the strategic use of Thai slightly more often for the Thai context text than the non-Thai one. Moreover, they tend to use Thai more often for top-down questions for both texts. Of the seven strategies that are used for this type of text, the top most strategy for both texts, is the use of Thai to examine or think about the context of word or phrase or to guess the meaning from context. Likewise, it is also the foremost strategy for top-down and bottom-up questions for both texts. The use of

Thai to understand the meaning of the sentence or find a reason is the other major strategy for top-down comprehension of the non-Thai context text as well. In addition, the strategy of using Thai to examine or think about the context of word or phrase or to guess the meaning from context is the most important one which affects the production of better answers for both texts. The other essential strategies for these sorts of answers are those to translate the word or phrase itself and to understand the meaning of the sentence or find a reason. The strategy of using formal schema is more important to the non-Thai text whereas that of using content schema is more useful for the Thai one as revealed by both single and multiple strategy usage. The other valuable strategy which affects the better answers is that of constructing or formulating ideas. Moreover, the use of multiple strategies seems to be useful when students cannot use a single strategy to find a correct answer.

Related to the problems from reading transactional texts, there are several general problems, grammar problems, problems with punctuation and problems with linkage which arise while reading. The major problems for both texts arise from a vocabulary deficit in that the students cannot understand the word(s) in the question or cannot find the answer and the habit of using exact quotes. The other major problem for the Thai one is that of subject/verb agreement whereas it is that of reference words for the non-Thai one. When attention is switched to question type, the major problems for top-down questions in both texts are the same that is the problem with resorting to the exact quotes, with using reference words, with answering only part of the question and with not understanding the word(s) in the question or not finding the answer. Besides, the students have the same major problem for bottom-up questions in both texts that is the problem with not understanding the word(s) in the question or not finding the answer. The other major problem with bottom-up questions for the Thai context text is that of subject/verb agreement while the problem with double or participial adjectives is the other one for the non-Thai context text.

The results in this chapter point to the fact that the students experience low outcomes in relation to both top-down and bottom-up skills for these texts even though they regularly use strategies to assist their comprehension.

The next chapter will report on the analysis of the editorial texts.

CHAPTER FIVE

READING COMPREHENSION AND EDITORIAL TEXTS

Chapter five reports the data analysis of reading comprehension of two editorial texts, which were concerned with Thai and Iranian politics. These texts were taken from editorial columns of “The Nation,” a popular English newspaper in Thailand which students would be expected to sample. Twenty students completed reading comprehension task 2 which consisted of questions about the two texts, a culturally familiar text or a Thai context text about Thai politics, and a culturally unfamiliar text or a non-Thai context text about Iranian politics. In this chapter, the relationships between scores and text type preferences, scores and text types, and scores and question types are presented. After the identification of strategies used by the students, the relationships between these strategies and scores as well as question types are discussed. Finally, problems mentioned by the students in comprehending the editorial texts are categorised and then related to top-down and bottom-up questions.

5.1 Preference for text types and scores

This part focuses on the preference of text type related to scores of reading comprehension task 2 based on these editorial texts. The results, calculated by using the SPSS program, are illustrated in a pie graph and a table followed by an explanation of the result.

5.1.1 Preference for text type

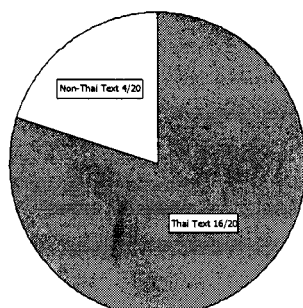


Figure 9 Numbers of students for text type preference,editor ial texts

Figure 9 shows that around four-fifths of the students prefer the Thai context text whereas the other one-fifth has a preference for the non-Thai one.

5.1.2 Preference for text type and scores

The preferences for the two text types, the Thai context text and the non-Thai context text, related to mean scores in each preference group are displayed in Table 28.

Table 28 Mean overall scores of reading comprehension task 2, editorial texts, for the Thai and the non-Thai context texts in each preference group

Preference		Text	Mean	N	Std. Deviation
Thai Text	Pair 1	Thai Text	8.68	16	3.07
		Non-Thai Text	5.46	16	2.47
Non-Thai Text	Pair 2	Thai Text	8.50	4	3.85
		Non-Thai Text	4.25	4	1.25

Table 28 shows the means of each text for each group of students. The scores for the Thai context text are higher than the scores for the non-Thai context text according to the preferences expressed for the two texts. Four-fifths of the students prefer the Thai context text and they can obtain higher scores for that text. Only one-fifth of them state a preference for the non-Thai context text and the scores for it are much lower than for the Thai one. Furthermore, standard deviations for the Thai context text in each group are higher than the non-Thai one.

The analysis indicates the fact that preference of the text appears to work in their favour in case of the Thai context text, but the scores of those preferring the non-Thai one show no such effect. Although the students prefer the non-Thai context text, the scores for the Thai one are much higher than the non-Thai one. This means that a familiarity of topic may have a stronger influence on reading comprehension than preference of text type. Moreover, if we observe the range of the means of both texts for the non-Thai context text preference group, the scores of the Thai one are much higher than the non-Thai one. Therefore, we can conclude in this chapter that a culturally

familiar text, the Thai one, perhaps has more effect on student comprehension than preference of text type. However, in any case we cannot yet infer that the preference of text type or even cultural familiarity has a positive effect on scores until results in the next chapter for the other genre, experiential texts, are analysed.

The analysis in this case has revealed an anomaly. Preference for the Thai context text is closely connected to scores for that text but this is not the case for the non-Thai context text. In relation to the latter, a preference did not result in higher scores.

This is confirmed by the results of a mixed factorial ANOVA using preference for editorial texts as the between-subjects factor and text type as the within-subjects factor. That is, although the effect of text type was highly significant ($F_{(1,18)} = 26.947, p < 0.001$), the main effect of preference was not significant ($F_{(1,18)} = 0.255, p = 0.620$), and no interaction was found between preference and text type ($F(1,18) = 0.514, p = 0.483$). This means that the overall task mean scores for the Thai context text regardless of text preference are higher than those for the non-Thai one.

5.2 Editorial texts and scores

In task 2, the students completed the reading comprehension activity, which consisted of the examination of two editorial texts dealing with Thai and Iranian politics. Each was followed by ten open-ended questions to be answered and one sentence based task in which the meaning was to be explained in Thai. The overall scores from reading both these editorial texts are displayed in Table 29.

Table 29 Overall scores for reading comprehension task 2, editorial texts

Score Types	Total Scores	Minimum	Maximum	Mean	Std. Deviation
Task Scores	50	6.50	23.50	13.87	4.88
Question Scores	40	6.00	19.00	11.42	4.06
Sentence Scores	10	.00	4.50	2.45	1.29

Table 29 shows the overall scores for editorial texts. Sentence scores are much lower than total scores and question scores are very low as well. The maximum scores for each score type are lower than fifty percent. Moreover, the minimum scores for sentences drop to zero while the minimum scores for task and questions are very low as well. When sentence scores and question scores are taken together, therefore, the total task scores are lower than fifty percent.

The next section will examine the relationship between the scores and context / question types.

5.3 Context types, question types and scores

This section reports on the findings from the data analysis on the relationships between context and question types and scores. The results are shown in bar graphs and tables followed by a short explanation of the results.

5.3.1 Context types and scores

The students completed reading comprehension task 2 which consisted of two editorial texts. This was followed by ten open-ended questions to be answered and one sentence, the meaning of which was to be explained in Thai. The scores from reading these two texts are different according to the type of text. Descriptive statistics are reported in Table 30.

Table 30 Task, question and sentence mean scores for editorial texts

Text	Total Scores	Minimum	Maximum	Mean	Std. Deviation
Thai Text Task Score	25	4.50	14.00	8.65	3.12
Non-Thai Text Task Score	25	.50	9.50	5.22	2.31
Thai Text Question Score	20	3.50	11.50	7.30	2.55
Non-Thai Text Question Score	20	.50	8.50	4.12	2.05
Thai Text Sentence Score	5	.00	3.00	1.35	.82
Non-Thai Text Sentence Score	5	.00	2.50	1.10	.77

Table 30 illustrates the comparison between the scores for the two editorial texts in all aspects. The overall task scores, question scores and sentence scores for both texts are lower than half, but those of the Thai one are higher than the non-Thai one. Although the range of scores for both texts is somewhat similar, noticeable differences appear when the maximum and the minimum scores are examined. The minimum scores for sentences for both texts fall to zero together with low question minimum scores mean that the overall task minimum scores are very low as well. However, both maximum and minimum scores for the Thai context text are higher than the non-Thai one. Moreover, the standard deviation for the Thai text scores in all aspects is slightly larger than that for the non-Thai one.

A paired sample T-test was used to analyse the differences between the scores of the Thai and the non-Thai context texts for editorial texts. The results show that there are statistically significant differences ($p < .05$) between the task scores for the two texts ($t = 6.029$, $df = 19$, $p < 0.001$, two-tailed) and question scores ($t = 6.398$, $df = 19$, $p < 0.001$, two-tailed) but no statistically significant differences ($p > .05$) between two texts for sentence scores ($t = 1.191$, $df = 19$, $p = 0.248$, two-tailed). Both the small sample size and variability of students may have precluded a significant effect.

These results suggest that the students in this study performed at a higher level for the familiar text, the Thai context text in comparison with the text about an unfamiliar subject.

5.3.2 Question types and scores

The ten open-ended questions for each text in the task comprised four categories of question type i.e. literal, figurative, global and cohesive. Differences between the application of these question types to the texts may cause varying difficulties for students trying to comprehend the texts. The nature of the responses to these differing questions can be seen from the percentages of correct answers for each question type.

Overall for both texts, the highest scores are attained with cohesive questions whereas the lowest scores are gained with literal questions. In addition, the equal scores for figurative and global questions are slightly higher than literal ones, but much lower than cohesive results, as shown in Figure 10.

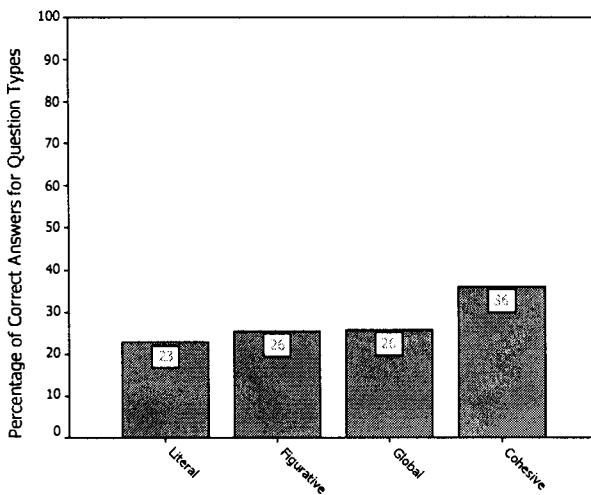


Figure 10 Percentage correct for each question type of editorial texts

When the results are compared for the four different question types from both texts, the results show that students attained much higher scores for the Thai context texts in all question types than those for the non-Thai context text. However, the scores of each question type for both texts are lower than fifty percent except the scores of Thai text cohesive questions, which are fifty percent as displayed in Figure 11.

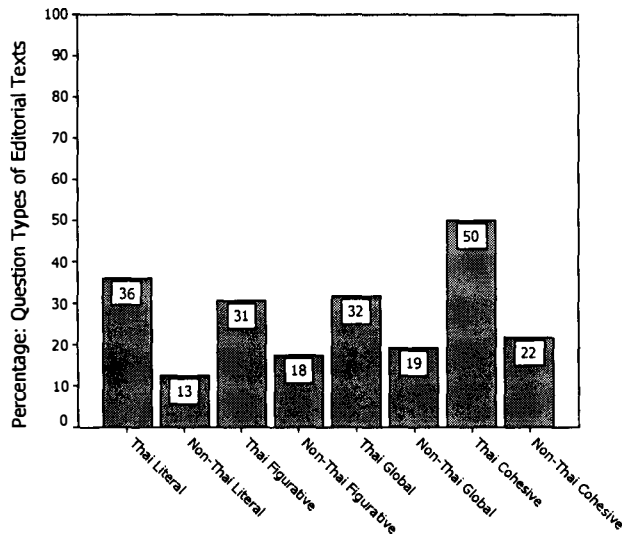


Figure 11 Percentage correct for each question type Thai and non-Thai editorial texts

According to one model of the reading process, literal and figurative questions relate to the bottom-up section which depends upon the small units although the larger units may also be involved in the comprehension process. Conversely, global and cohesive questions are part of the top-down section in which the large units are decisive (Cohen, 1994a, 213-214; Dubin, Eskey, & Grabe, 1986, 11-13; Paran, 1997, 1-3).

In relation to Figure 11, the scores of both bottom-up and top-down questions in the Thai context text are higher than for the non-Thai one as illustrated in Figure 12.

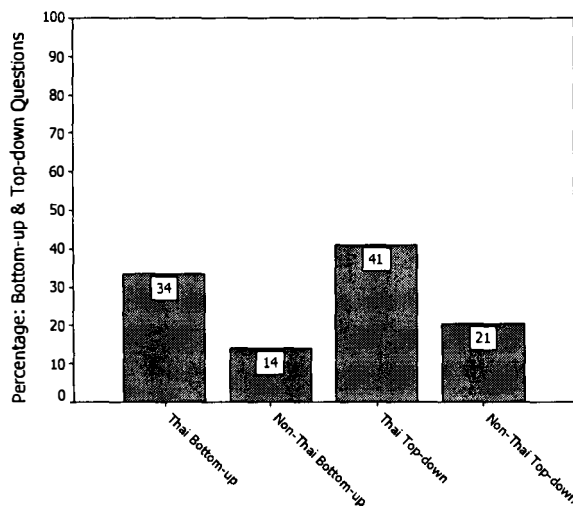


Figure 12 Percentage correct of bottom-up and top-down questions for each text, editorial texts

When put together as shown in Figure 13, total scores of top-down questions for editorial texts are higher than the scores of bottom-up questions and both are lower than fifty percent.

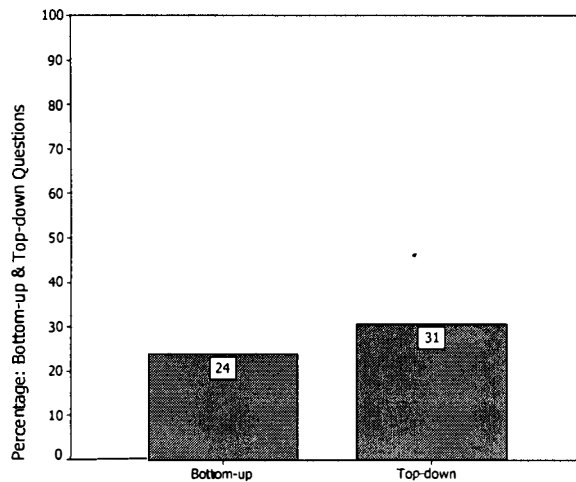


Figure 13 Percentage correct of bottom-up and top-down questions, editorial texts

As indicated in Figures 10, 11, 12 and 13, the scores of cohesive questions are the highest ones, whereas the scores of literal questions are the lowest and the scores of figurative and global questions are equally low. Even though the scores of cohesive questions for the Thai text are high, those for the non-Thai one are rather low. The students have major problems with literal questions for the non-Thai text which can be regarded as being related to the operation of bottom-up processes. Students also obtain very low scores with figurative and global questions in both text types, especially for the non-Thai one. Overall, the means for bottom-up processes are lower than those for top-down processes in editorial texts.

The results indicate that student reading skills need to be enhanced for editorial texts with literal questions, the meaning of figurative language and global questions for both Thai and non-Thai context texts. Besides, cohesive questions in the case of the non-Thai text present problems for comprehension.

5.4 Strategies related to scores and question types

After answering each open-ended question in reading comprehension task 2, the students were asked to write down the reasons for selecting the answer that they gave for each question. In addition, soon after completing the task for each text, the students engaged in a retrospective interview which was concerned with the strategies used to make a decision for each answer. The strategies connected with the use of Thai from both the open-ended questions and the interviews are analysed here and the results are displayed in tables and text.

5.4.1 Strategies of using Thai

From the task and the interview, it appears that students access their own language to help them comprehend the editorial texts and in doing so use several strategies. Statements made by the students about these strategies have been compacted into eight strategies as follows:

- S1 to translate a word or a phrase itself
- S2 to examine or think about the context of words or phrases or guess the meaning from context
- S3 to understand the meaning of the sentence or find a reason
- S4 to confirm the understanding about the sentence
- S5 to compare the English with the Thai grammar by using formal schema
- S6 to access or find the reader's ideas by using content schema
- S7 to construct or formulate ideas
- S8 to summarise ideas
- S0 no use of Thai

The strategies used for comprehending editorial texts can be seen as in the following sample statements from the students, transcribed from the retrospective interviews (all names in the transcript have been changed to keep identities confidential). In each case the type of question is mentioned in brackets following the statement.

Example 1

S1: to translate a word or a phrase itself

(From Task 2 Text 1: Thai Politics, Question 3, Figurative Question)

Question: What is the meaning of "mend broken fences" in line 9?

Reviewer: How did you get the meaning of this phrase?

S02B : I didn't know the meaning of this phrase so I tried to translate into Thai.

Reviewer: Why did you translate into Thai?

S02B : Thai helped me get the meaning of it.

Example 2

S1: to translate a word or a phrase itself

(From Task 2 Text 2: Iranian Politics, Question 7, Literal Question)

Question: What does the word "minute" in line 10 mean?

Reviewer: How did you know the meaning of this word?

S19S : I read the text and then translated into Thai to get the meaning of it.

Example 3

S2: to examine or think about the context of words or phrases or guess the meaning from context

(From Task 2 Text 1: Thai Politics, Question 5, Figurative Question)

Question: What is the meaning of "in a crisp, a decisive CEO style" in line 6?

Reviewer: How did you get the meaning of this phrase?

S11K : I thought in Thai.

Reviewer: Why did you think in Thai?

S11K : Because I didn't know the meaning of this phrase at all so I tried to think in Thai to understand the context of it. Therefore, I could find the meaning of it.

Example 4

S2: *to examine or think about the context of words or phrases or guess the meaning from context*

(From Task 2 Text 2: Iranian Politics, Question 4, Figurative Question)

Question: *What is the meaning of “mover and shake:” in line 9?*

Reviewer: *How did you get the meaning of this phrase?*

S18R : *I got the meaning of this phrase from context and then thought in Thai.*

Example 5

S3: *to understand the meaning of the sentence or find a reason*

(From Task 2 Text 1: Thai Politics, Question 2, Global Question)

Question: *How did Laos accept the visit of Thai Prime minister?*

Reviewer: *How did you get the answer?*

S09I : *I tried to find out key words of the sentences and then thought in Thai.*

Thinking in Thai helped me understand the sentence easier than thinking in English.

Example 6

S3: *to understand the meaning of the sentence or find a reason*

(From Task 2 Text 2: Iranian Politics, Question 8, Literal Question?)

Question: *Why is the USA afraid of Iran?*

Reviewer: *How did you find the reason for this question?*

S12L : *I tried to think in Thai to find out the reason.*

Reviewer: *Why did you think in Thai?*

S12L : *It helped me understand the sentence and could find the reason easily.*

Example 7

S4: *to confirm the reader understands about the sentence*

(From Task 2 Text 1: Thai Politics, Question 4, Figurative Question)

Question: *What is the meaning of “open-minded” in line 11?*

Reviewer: *How did you get the meaning of this word?*

S14N : *I’ve heard this word from one kind of coffee advertisement. I thought that I know the meaning of this word but I was not sure so I tried to translate this word from the sentence again to confirm my idea.*

Example 8

S4: *to confirm the reader understands the sentence*

(From Task 2 Text 2: Iranian Politics, Question 9, Cohesive Question)

Question: *The word “who” in line 10 refers to...*

Reviewer: *How did you get the answer?*

S04D : *I thought in Thai that the word “who” must be a human so it should be the President Khatami. In order to make sure about the answer, I translated the sentence into Thai again.*

Example 9

S5: *to compare the English with the Thai grammar by using formal schema*

(From Task 2 Text 1: Thai Politics, Question 7, Literal Question)

Question: *In what two areas would Laos like to cooperate with Thailand?*

Reviewer: *You said that your background knowledge helped you answer this question.*

S12L : *Yes. I also compared the English sentence with a Thai sentence. Conjunction “and” was used to join two phrases together in both Thai and English. Therefore, I could find the answer “in the economic field and the hydroelectricity industry”.*

Example 10

S5: *to compare the English with the Thai grammar by using formal schema*

(From Task 2 Text 2: Iranian Politics, Question 5, Cohesive Question)

Question: *The word “who” in line 10 refers to...*

Reviewer: *How did you get this answer?*

S17Q : *I’ve known about this structure. A relative pronoun “who” must refer to a person. I compared this sentence with a Thai sentence by thinking in Thai so I got the answer.*

Example 11

S6: *to access or find the reader’s ideas by using content schema*

(From Task 2 Text 1: Thai Politics, Question 7, Literal Questions)

Question: *In what two areas would Laos like to cooperate with Thailand?*

Reviewer: *How did you get the answer for this question?*

S12L : *I thought in Thai so I got the answer. I also had background knowledge about when the Thai Prime Minister visited Laos.*

Reviewer: *Did your background knowledge about this help you find the answer?*

S12L : *Yes, very much.*

Example 12

S6: *to access or find the reader’s ideas by using content schema*

(From Task 2 Text 2: Iranian Politics, Question 8, Literal Question)

Question: *Why is the USA afraid of Iran?*

Reviewer: *How did you get the answer?*

S06F : *I read the text and I know about the relationship between the USA and Iran from newspapers and television.*

Reviewer: *Did your prior knowledge about this help you answer the question?*

S06F : *Yes. When I read about this from the text I could understand the text easily.*

Example 13

S7: to construct or formulate ideas

(From Task 2 Text 1: Thai Politics, Question 2, Global Question)

Question: How did Laos accept the visit of Thai Prime minister?

Reviewer: How did you get the answer?

S19S : I translated the details of the text first, then reconstructed and formulated my ideas in Thai. Finally, I could get the answer.

Example 14

S7: to construct or formulate ideas

(From Task 2 Text 2: Iranian Politics, Question 2, Global Question)

Question: What should Khatami do to show his ability to govern Iran in his second term as President?

Reviewer: How did you get this answer?

S11K : I tried to use Thai to formulate ideas about the text. I knew the meaning of the words but I couldn't join them together so I used Thai to construct ideas.

Example 15

S8: to summarise ideas

(From Task 2 Text 1: Thai Politics, Question 7, Literal Question)

Question: In what two areas would Laos like to cooperate with Thailand?

Reviewer: How did you get the answer?

S18R : I translated the sentence into Thai first and then summarised ideas so I could find the answer for this question.

Example 16

S8: to summarise ideas

(From Task 2 Text 2: Iranian Politics, Question 1, Global Question)

Question: What does this text mainly discuss?

Reviewer: How did you get the answer?

S02B : Firstly, I read through the text and then translated into Thai. Finally, I summarised the main point of the text. Thai helped me summarise my ideas about the text.

Example 17

S0: no use of Thai to assist comprehension

(From Task 2 Text 1: Thai Politics, Question 10, Cohesive question)

Question: The word “them” in line 16 refers to...

Reviewer: How did you get this answer?

S10J : I read the sentence and then answered the question?

Reviewer: Did you think in Thai?

S10J : No, I didn't.

Reviewer: Why didn't you think in Thai?

S10J : Because I could understand the meaning of the sentence without translating into Thai. It was easy to understand.

Example 18

S0: no use of Thai to assist comprehension

(From Task 2 Text 2: Iranian Politics, Question 10, Cohesive Question)

Question: The phrase “this impression” refers to...

Reviewer: How did you get the answer?

S17Q : I read lines 15 and 16 in the text and then got the answer for this question.

Reviewer: Did you translate or think in Thai?

S17Q : No, I didn't

Reviewer: Why?

S17Q : Because when I read the text, I knew the answer without thinking in Thai. I've learned about this structure before.

In the case of the reading comprehension of editorial texts, some students report using Thai to facilitate their reading, but other students report resorting to Thai only when needed. The results are shown in Figures 14 and 15.

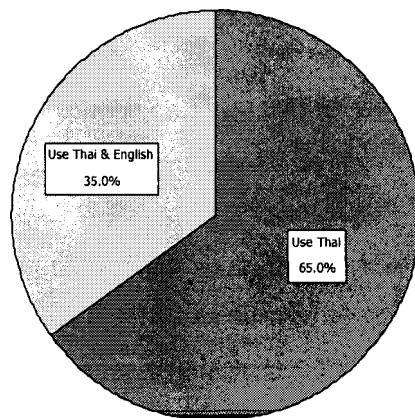


Figure 14 Language usage, the Thai context editorial text

Figure 14 shows that sixty-five percent of the students translate the text and their ideas about the questions into Thai to assist their comprehension of the Thai context text, whereas the other thirty-five percent use both Thai and English according to need.

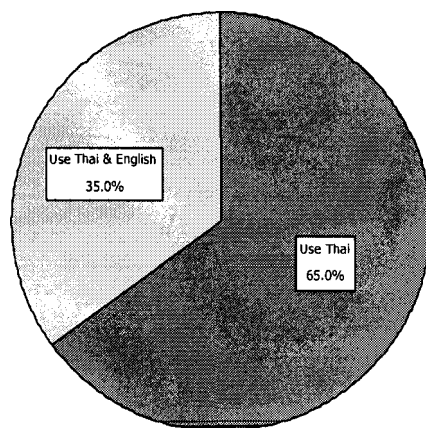


Figure 15 Language usage, the non-Thai context editorial text

Likewise, Figure 15 shows that sixty-five percent of the students report using strategies to support their comprehension for the non-Thai context editorial text whilst thirty-five percent of them indicate a mixed language use according to the situation.

Furthermore, in this study, the students sometimes record using more than one strategy while reading. Therefore, a crosstabulation for multiple responses by means of the SPSS program was undertaken to analyse the relationship between the strategies of using Thai while reading related to the student groups for each strategy. The results are reported based on the numbers of responses for using each strategy.

In the case of the Thai context editorial text about Thai politics, the results show that almost all students used the Thai language to support their understanding while reading the text. Eight strategies were used. Of these, nearly half of all responses indicate the students use Thai to examine or think about the context of words or phrases or guess the meaning from context, while only about thirteen percent of the respondees are using Thai to understand the meaning of the whole sentence or to find a reason. The percentage of using Thai to translate the word or phrase is slightly lower than with the preceding strategy. The number of responses for using Thai to construct or formulate their ideas is similar to that for using Thai formal schema to compare the English to the Thai grammar. Only a few admit using content schema to access ideas, summarise ideas and confirm the reader understands about the sentence. Moreover, the number avoiding using Thai is somewhat low for the Thai context editorial text. The results are displayed in Table 31 where the frequency column refers to the number of times a strategy is mentioned and the percentage column shows the percentage of the responses.

Table 31 Strategies of Thai usage for the Thai context editorial text

<u>Strategies</u>	<u>Frequency</u>	<u>Percentage</u>
S2 Examine	94	43.1
S3 Understand	29	13.3
S1 Translate	22	10.1
S7 Construct Ideas	21	9.6
S5 Formal schema	20	9.2
S6 Content schema	8	3.7
S8 Summarise Ideas	4	1.8
S4 Confirm	2	.9
S0 No use of Thai	18	8.3
Total	218	100.0

When the students are divided into three groups based on their performance in this task, low, medium and high, the strategies of using Thai are slightly different from this and are shown in Table 31. Thai usage to examine or think about the context of words or phrases or guess the meaning from context is the foremost strategy for the students in all groups for Thai context editorial text and the other major one for all groups is the usage of Thai to understand the meaning of the sentence or find a reason. For the high group, the other major strategy is to construct and formulate ideas whereas those to construct and formulate ideas and to use Thai formal schema are popular for the medium group. Moreover, the other major strategy for the low group is that to construct and formulate ideas. At the opposite end of the scale, minor strategies for the high group are the usage of Thai to confirm the reader understands about the sentence and the usage of Thai content schema and no evidence exists of using Thai to summarise ideas for this group. The minor strategies for the medium group are the usage of Thai to confirm the reader understands about the sentence and to summarise ideas. For the low group, there is only one case reporting the use of Thai to summarise ideas and no evidence about using Thai content schema and using Thai to confirm the reader understands about the sentence. In addition, some students in all groups avoid the use of Thai to assist their understanding. The results are displayed in Table 32.

Table 32 Percentage of Thai usage for each group, the Thai context editorial text

Strategies	Score Groups			Percentage
	Low	Medium	High	
S2 Examine	13.3	13.8	16.1	43.1
S3 Understand	4.6	4.6	4.1	13.3
S1 Translate	2.8	5.0	2.3	10.1
S7 Construct Ideas	3.2	2.3	4.1	9.6
S5 Formal Schema	2.8	4.6	1.8	9.2
S6 Content Schema	.0	2.8	.9	3.7
S8 Summarise Ideas	.5	1.4	.0	1.8
S4 Confirm	.0	.5	.5	.9
S0 No use of Thai	2.3	1.8	4.1	8.3
<u>Total</u>	29.4	36.7	33.9	100.0

For the non-Thai context text, Iranian politics, all students report using Thai to support their comprehension while reading. Eight strategies are used for this text. Slightly more than one-third of the students' responses relate to the usage of Thai to examine or think about the context of words or phrases or guess the meaning from context. The second most frequent strategy is the usage of Thai to understand the meaning of the sentence or find a reason. The other major strategy is the use of Thai to construct ideas. Around one-fourth of the students' responses are connected to the use of Thai formal schema to compare the English to the Thai grammar as well as to summarise ideas. The strategy of using Thai to translate the word or phrase itself is slightly less used than these. Only a few use content schema and Thai to confirm the reader understands about the sentence. In around six percent of instances the students do not use Thai for comprehending the text. The results are displayed in table as shown in Table 33.

Table 33 Strategies of Thai usage for the non-Thai context editorial text

<u>Strategies</u>	<u>Frequency</u>	<u>Percentage</u>
S2 Examine	79	36.1
S3 Understand	44	20.1
S7 Construct Ideas	23	10.5
S5 Formal schema	19	8.7
S8 Summarise	19	8.7
S1 Translate	15	6.8
S6 Content Schema	5	2.3
S4 Confirm	2	.9
S0 No use of Thai	13	5.9
Total	219	100.0

When divided into three groups, low, medium and high, the students in all groups reveal the use of the same foremost strategies, the strategy of using Thai to examine or think about the context of a word or phrase or guess the meaning from context. The other major strategies for all groups are those of using Thai to understand the meaning of the sentence or finding the reason and to construct or formulate ideas. The usage of Thai formal schema to compare the English with the Thai grammar is popular for the students in the medium group as well the usage of Thai to summarise ideas and to translate the words or phrases in a sentence. On the other hand, minor strategies for all groups are the use of Thai to access the reader's ideas by using content schema. The other minor strategies for the high group are those of using Thai to confirm the reader understands

about the sentence and to summarise ideas whereas the other one for the low group is that to translate the words or phrases in a sentence. Besides, there is no report about using Thai to confirm the reader understands for the low and the medium groups. However, a few in the low and medium groups do not report the strategy of using Thai to facilitate their understanding and slightly more students in the high group also fall into this category. The results are shown in Table 34.

Table 34 Percentage of Thai usage for each group, the non-Thai context editorial text

Strategies	Score Groups			Percentage
	Low	Medium	High	
S2 Examine	12.3	11.9	11.9	36.1
S3 Understand	7.8	4.6	7.8	20.1
S7 Construct Ideas	2.7	3.2	4.6	10.5
S5 Formal Schema	2.3	5.0	1.4	8.7
S8 Summarise	2.3	5.5	.9	8.7
S1 Translate	.5	4.6	1.8	6.8
S6 Content Schema	.5	.9	.9	2.3
S4 Confirm	.0	.0	.9	.9
S0 No use of Thai	.9	1.4	3.7	5.9
Total	29.2	37.0	33.8	100.0

The results from Tables 31, 32, 33 and 34 point to the fact that most of the students use Thai to assist their understanding for both editorial texts. The two leading strategies for both texts are using Thai to examine or think about the context of word or phrase or to guess the meaning from context and to understand the meaning of the sentence or find a reason. However, there is a difference in the next most common strategy. For the Thai context text, the third most used strategy is translating the word or phrase into Thai whilst in the non-Thai context text constructing or formulating ideas is the next important one. This may be an indication that the students were experiencing more difficulty with the ideas in this latter text. Besides, the most infrequently used strategy for both texts is the same, the strategy of using Thai to confirm what the reader understands about the sentence.

Likewise if the level groupings are examined, the students in all groups, low, medium and high use the same foremost strategy, the usage of Thai to examine or think about the context of a word or phrase or to guess the meaning from context, for both

texts. Minor strategies for the high group are the use of Thai to confirm the reader understands about the sentence, summarise ideas and access the reader's ideas by using content schema. The use of content schema to access the reader's ideas is a minor strategy for the low and medium groups as well. Moreover, students in the high group report the avoidance of using Thai slightly more often than the other groups.

These results show that the students usually use the Thai language to assist their comprehension of editorial texts, especially the strategy of using Thai to examine or think about the context of a word or phrase or to guess the meaning from context.

When comparing the use of Thai between both texts, it is apparent that the students in the high group use the same major strategies for both texts, the use of Thai to examine or think about the context of words or phrases or guess the meaning from context, understand the meaning of the sentence or find a reason and construct or formulate ideas. The minor strategies for the students in this group are the use of Thai to confirm the reader understands about the sentence and access the reader's ideas by using content schema.

For the students in the medium group, the same major strategies for both texts are the use of Thai to examine or think about the context of words or phrases or guess the meaning from context, understand the meaning of the sentence or find a reason, translate the word or phrase itself and use formal schema. Moreover, the use of Thai to summarise ideas and construct or formulate ideas are frequently used for the non-Thai context text for this group whereas the first mentioned strategy is a minor one for the Thai context text. The other minor strategy for the Thai text for this medium group is to confirm the reader understands about the sentence whereas to use content schema is a minor one for the non-Thai context text.

For the low group, the strategies of using Thai to examine or think about the context of words or phrases or guess the meaning from context, understand the meaning of the sentence or find a reason and construct or formulate ideas are major strategies for both texts. The minor strategy for the Thai context text for this group is that to summarise ideas whereas that to use content schema is the minor one for the non-Thai context text.

In addition, the frequency of the strategic use for the Thai editorial text is 1.0 time per question and 1.03 times per question for the non-Thai one. This means that the students tend to make similar usage of strategies in terms of frequency for both texts.

5.4.2 Strategies and scores

The previous part shows the results about the frequency of the strategies for editorial texts but does not clarify the relationship between the usage of strategies and overall scores. Therefore, the strategies related to scores and strategies and their connection to better answers are reported in this part.

5.4.2.1 Strategies related to scores

According to the marking system, each question is marked out of 2. Where the student is able to comprehend the text and answer the question, he/she is likely to gain a score of 2, 1.5 or 1. On the other hand, if he/she is having difficulty with comprehension, his/her mark will be .5 or 0. As it is intended to compare strategies used with scores, the scores will be divided into two sections as indicated. In this way an identification can be made of what strategies are used for producing the better answers.

The next table shows scores and level of comprehension obtained for each answer for the non-Thai context transactional text. Despite the fact that students used Thai to facilitate their understanding, slightly more than half of them still experience difficulties with comprehension for this text. The results are displayed in Table 35.

Table 35 Percentage for high/low scores, the Thai context editorial text

Score	Frequency	Percentage	Comprehension
0	103	51.5	Show non-comprehension
0.5	3	1.5	Show non-comprehension
1	39	19.5	Show comprehension
1.5	15	7.5	Show comprehension
2	40	20.0	Show comprehension
Total	200	100.0	

For the non-Thai context text, around three-fourths of the answers reveal non-comprehension of the text, whereas the other one-fourth of the answers display the ability to comprehend the text. The results are displayed in Table 36.

Table 36 Percentage for high/low score, the non-Thai context editorial text

Score	Frequency	Percentage	Comprehension
0	130	65.0	Show non-comprehension
0.5	16	8.0	Show non-comprehension
1	32	16.0	Show comprehension
1.5	4	2.0	Show comprehension
2	18	9.0	Show comprehension
Total	200	100.0	

There are both positive and negative results from the use of Thai to implement individual strategies to comprehend the texts. Some students attain high scores from this usage but some gain very low scores or even zero.

For the Thai context text, slightly more than half of the items where students use the whole range of strategies are given low scores. When looking at scores for the use of each strategy, it is apparent that the percentages of high scores for almost all the strategies are no higher than the low ones and in fact slightly below those of the low scores. Moreover, amongst the students who do not use Thai, there is no indication that the non-use of Thai achieves higher scores. The results displayed in Table 37 fail to indicate any associated advantage from using strategies.

Table 37 Strategies of Thai usage related to scores, the Thai context editorial text

Strategies	Low Score (0-.5 Marks)	High Score (1- 2 Marks)	Total
S2 Examine	22.8	20.3	43.1
S3 Understand	7.2	6.1	13.3
S1 Translate	5.5	4.6	10.1
S7 Construct Ideas	4.9	4.7	9.6
S5 Formal Schema	5.2	4.0	9.2
S6 Content Schema	1.8	1.9	3.7
S8 Summarise Ideas	.7	1.1	1.8
S4 Confirm	.4	.5	.9
S0 No use of Thai	4.5	3.8	8.3
Total	53.0	47.0	100.0

For the non-Thai context text, the results show that around three-fourths of all answers are given the low scores for their non-comprehension of the text, whereas around one-fourth of them are given high scores. When looking at scores for each strategy, it is apparent that the percentages of the high scores for almost all strategies are much lower than those of the low scores. Moreover, those few students who do not use Thai at all are not able to gain high scores in this case. The results are illustrated in Table 38.

Table 38 Strategies of Thai usage related to scores, the non-Thai context editorial text

Strategies	Low Score (0-.5 Marks)	High Score (1- 2 Marks)	Total
S2 Examine	26.1	10.0	36.1
S3 Understand	14.7	5.4	20.1
S7 Construct Ideas	7.5	3.0	10.5
S5 Formal Schema	7.0	1.7	8.7
S8 Summarise Ideas	6.6	2.1	8.7
S1 Translate	5.0	1.8	6.8
S6 Content Schema	1.5	.8	2.3
S4 Confirm	.5	.4	.9
S0 No use of Thai	4.1	1.8	5.9
Total	73.0	27.0	100.0

The results from Tables 35, 36, 37 and 38 indicate that the major strategy of using Thai to examine or think about the context of word or phrase or to guess the meaning from context affects the scores in both positive and negative ways. All strategies used show more positive effects for the Thai context text than the non Thai one. For the Thai context text, slightly more than half of the items where students use the whole range of strategies are given low scores. For the non-Thai context text, around three-fourths of all answers are given low scores whereas around one-fourth are given high scores for the abilities to comprehend the text. This means that the strategy of using Thai moderately help the students to obtain scores for the Thai context text whereas these strategies appear to have little good effect for the non-Thai one. In addition, the strategy of not-using Thai has not been shown to have a positive effect for editorial texts.

5.4.2.2 Strategies related to better answers

Results to date have shown strategy usage is not always associated with improving student comprehension. Therefore, the term strategy will in this section refer only to useful strategies which influence the learners such a way that they produce better answers with the scores of one, one and a half and two. Some students use only one strategy to gain scores but some use double strategies to gain scores.

The finding on the Thai editorial text scores reveals that one-third of better answers are influenced by the strategy of using Thai to examine or think about the context of words or phrases or guess the meaning from context. The other important strategies for achieving higher scores are the strategies of using Thai to understand the meaning of the sentence or find a reason, to translate the word or phrase itself and to construct or formulate ideas. In a few of these cases students use the strategies to compare the English with the Thai Grammar by using Thai formal schema, to access the reader's ideas by using content schema, to confirm the reader's understanding about the sentence and to summarise ideas. Nevertheless, some students use double strategies for producing better scores. An examination of the leading multiple usages reveals that the students use their formal schema (S5) combined with another strategy, that is S5+S2 (to use Thai formal schema to compare the English with the Thai grammar and to examine or think about the context of words or phrases or guess the meaning from context). The other prominent one is the combination of using Thai content schema (S6) and another strategy that is S6+S7 (to access or find the reader's ideas by using content schema and to construct or formulate ideas). For those who gave better answers there are some who do not use any strategy. The results are shown in Table 39.

Table 39 Strategies related to better answers, the Thai context editorial text

<u>Single Strategy Use</u>	<u>Usage</u>	<u>Percentage</u>
S2 - to examine or think about the context of words or phrases or guess the meaning from context		33.0
S3 - to understand the meaning of the sentence or find a reason		18.0
S1 - to translate the word or phrase itself		11.8
S7 - to construct or formulate ideas		9.6
S5 - to use Thai formal schema to compare the English with the Thai Grammar		3.1
S6 - to use content schema to access or find the reader's ideas		3.1
S4 - to confirm the reader understands about the sentence		2.3
S8 - to summarise ideas		1.0
S0 - no reference to strategy use		8.6
 <u>Multiple Strategy Use</u>		
S5+S2 - to use Thai formal schema to compare the English With the Thai grammar and to examine or think about the context of words or phrases or guess the meaning from context		3.2
S6+S7 - to use content schema to access or find the reader's Ideas and to construct or formulate ideas		2.3
S6+S8 - to use content schema to access or find the reader's ideas and to summarise ideas		1.0
S6 +S5- and to use content schema to access or find the reader's ideas and to use Thai formal schema to compare the English with the Thai grammar		1.0
S5 +S1- to use Thai formal schema to compare the English with the Thai grammar and to translate the word or phrase itself		1.0
S5+S7 - to use Thai formal schema to compare the English with the Thai grammar and to construct or formulate ideas		1.0
	Total	100.0

For the non-Thai context text, it is noticeable that the topmost single strategy for the better answers is the strategy of using Thai to examine or think about the context of words or phrases or guess the meaning from context. It appears in around one-third of the strategies for the better answers. The other major strategy which has an effect on the better answers is that of using Thai to understand the meaning of the sentence or find a reason. The other one which is involved in the better answers is that of using Thai to summarise ideas. A few of the better answers refer to those of using Thai to construct or

formulate ideas, to translate the word or phrase itself, to access the reader's ideas by using content schema and to compare the English with the Thai grammar by using formal schema. However, some students use double or triple strategies to attain high scores. One multiple strategy which influences the better answers is the combination of using formal schema (S5) and other strategies that is S5+S7 (to use Thai formal schema to compare the English with the Thai grammar and to construct or formulate ideas). In addition, some avoidance of the use of strategies can characterise the production of correct answers. The results are illustrated in Table 40.

Table 40 Strategies related to better answers, the non-Thai context editorial text

<u>Single Strategy Use</u>	<u>Usage Percentage</u>
S2 - to examine or think about the context of words or phrases or guess the meaning from context	33.4
S3 - to understand the meaning of the sentence or find a reason	24.1
S8 - to summarise ideas	11.2
S7 - to construct or formulate ideas	7.5
S1 - to translate the word or phrase itself	5.5
S6 - to use content schema to access or find the reader's ideas	3.7
S5 - to use Thai formal schema to compare the English with the Thai Grammar	1.8
S0 - no reference to strategy use	5.5
<u>Multiple Strategy Use</u>	
S5+S7 - to use Thai formal schema to compare the English with the Thai grammar and to construct or formulate ideas	3.7
S5+ S2 - to use Thai formal schema to compare the English with the Thai grammar to examine or think about the context of words or phrases or guess the meaning from context	1.8
S5+S2+S8 - to use Thai formal schema to compare the English with the Thai grammar, to examine or think about the context of words or phrases or guess the meaning from context, and to summarise ideas	1.8
Total	100.0

Tables 39 and 40 indicate the fact that the topmost strategy, having an effect on gaining high scores in both editorial texts, is that of using Thai to examine or think about the context of words or phrases or guess the meaning from context. The other major strategies for the better answers are those to understand the meaning of the sentence or find a reason which affects the better answers for both editorial texts and translate the word or phrase itself which affects the better answers for the Thai context text than the non-Thai one. The strategy of using Thai to construct or formulate ideas also seems to have a more beneficial influence for the Thai text than the non-Thai one whereas that of using Thai to summarise ideas is more important for the non-Thai one. The strategies of using Thai formal schema and content schema have slightly greater effects for the Thai text than for the non-Thai one. Moreover, multiple strategies are useful for a few students when they are not satisfied with using only one strategy to find the correct answers. Important multiple strategies for the Thai context text are the combination of using Thai formal schema plus another strategy and the combination of using Thai content schema and another strategy. For the non-Thai context text, the important multiple strategy is the combination of using Thai formal schema and other strategy. Additionally, the avoidance of using strategies leads to better answers on the Thai context text than the non-Thai one. However, when the frequency of using these strategies in Tables 31 (see page 122) and 33 (see page 124) is compared, it is apparent that the number of better answers from using these strategies is still low. There is apparently no guarantee that strategy use will produce better answers.

5.4.3 Strategies and question types

From the results of both texts in the task and the interviews, it appears that strategies are used differently according to question type categories, that is, bottom-up or top-down. Top-down questions comprise global and cohesive questions whereas bottom-up questions comprise literal and figurative questions. The next aspect presents the relationship between the strategies and question types first with regard to the separate texts then an overview is given.

For the text about Thai politics, the major strategies for top-down questions are the use of Thai to examine or think about the context of word or phrase or guess the meaning from context and the use of Thai to understand the meaning of the sentence or find a reason. The third and the fourth most frequent strategies are the use of Thai to construct or formulate ideas and the use of Thai formal schema. Besides, some cases use content schema to assist their top-down questions. On the other hand, minor strategies are the use of Thai to translate the word and phrase itself and to summarise ideas. In addition, there are some responses for the non-use of Thai in top-down questions. The results are displayed in Table 41.

Table 41 Strategies used in top-down questions, the Thai context editorial text

Strategies	Frequency	Percentage
S2 Examine	22	25.3
S3 Understand	19	21.8
S7 Construct Ideas	13	14.9
S5 Formal schema	9	10.3
S6 Content schema	6	6.9
S1 Translate	3	3.4
S8 Summarise Ideas	3	3.4
S0 No use of Thai	12	13.8
Total	87	100.0

For bottom-up questions of the Thai context text, Thai politics, the major strategy is also the use of Thai to examine or think about the context of word or phrase or guess the meaning from context. The next most frequent strategy is the use of Thai to translate the word or phrase itself. Some responses are the use of Thai formal schema, the use of Thai to understand the meaning of the sentence or find a reason and to construct or formulate ideas. The minor strategies are the use of Thai to confirm the reader understands about the sentence, to summarise ideas and the use of Thai content schema. In addition, a few students fail to report the use of any strategy. The results are displayed in Table 42.

Table 42 Strategies used in bottom-up questions, the Thai context editorial text

Strategies	Frequency	Percentage
S2 Examine	72	55.5
S1 Translate	19	14.5
S5 Formal schema	11	8.4
S3 Understand	10	7.6
S7 Construct Ideas	8	6.1
S4 Confirm	2	1.5
S6 Content schema	2	1.5
S8 Summarise Ideas	1	.8
S0 No use of Thai	6	4.6
Total	131	100.0

Likewise, the strategy of examining or thinking about the context of a word or phrase or guessing the meaning from context is the foremost strategy for top-down questions in the non-Thai context text. The use of Thai to understand the meaning of the sentence is another major strategy as well. Other frequent strategies are the use of Thai to summarise ideas and to construct ideas. Some cases report on using formal schema for top-down questions. Minor strategies are those of using content schema, confirming the reader understands and translating the word or phrase itself. In addition, there are some responses indicating the non-use of any strategy. The results are shown in Table 43.

Table 43 Strategies used in top-down questions, the non-Thai context editorial text

Strategies	Frequency	Percentage
S2 Examine	25	28.7
S3 Understand	19	21.8
S8 Summarise	12	13.8
S7 Construct	11	12.6
S5 Formal schema	8	9.2
S1 Translate	3	3.4
S4 Confirm	1	1.1
S6 Content Schema	1	1.1
S0 No use of Thai	7	8.0
Total	87	100.0

Again, the strategy of using Thai to examine or think about the context of a word or phrase or guess the meaning from context is the topmost strategy for bottom-up questions in the non-Thai context editorial text. Another major one is the use of Thai to understand the meaning of the sentence or find a reason. Other frequent strategies are the use of Thai to translate the word or phrase itself, to construct or formulate ideas and the use of Thai formal schema. On the other hand, the use of Thai to confirm the reader understands about the sentence, to summarise ideas and the use of content schema are minor strategies for bottom-up questions. Besides, a few responses avoid mentioning strategies. The results are displayed in Table 44.

Table 44 Strategies used in bottom-up questions, the non-Thai context editorial text

Strategies	Frequency	Percentage
S2 Examine	54	41.9
S3 Understand	25	19.4
S1 Translate	12	9.3
S7 Construct Ideas	12	9.3
S5 Formal schema	11	8.5
S8 Summarise Ideas	5	3.9
S6 Content Schema	4	3.1
S4 Confirm	1	.8
S0 No use of Thai	5	3.9
Total	129	100.0

From Tables 41, 42, 43 and 44, the combined results point to the fact that the strategy of using Thai for examining or thinking about the context of a word or context or guessing the meaning from context is the topmost strategy for editorial texts for both top-down and bottom-up questions. The use of Thai formal schema is more important than that of content schema for both top-down and bottom-up questions in the Thai context text as well as the non-Thai one. The strategy for understanding the meaning of the sentence or finding a reason is the major strategy for top-down questions in both the Thai and the non-Thai context texts as well as bottom-up questions for the non-Thai one. The other major strategy for bottom-up questions in the Thai context text is that of translating the word or phrase itself whereas this strategy is a minor strategy for top-down questions in both Thai and non-Thai context editorial texts. The strategy of using Thai to confirm the reader understands is a minor strategy for bottom-up questions in both texts and for top-down questions in the non-Thai text and no evidence of using this strategy for top-down questions in the Thai context text exists. Besides, the use of Thai to summarise

ideas is another minor strategy for bottom-up skills in both Thai and non-Thai context texts and for top-down skills in only the Thai one. In addition non-Thai usage is fairly infrequent with these editorial texts.

In addition, the frequency of strategic use for top-down questions of the Thai editorial text is 0.93 time per question and 1.04 times per question for bottom-up questions. For the non-Thai context texts, it appears that the students use Thai to assist their answers 1.0 time per question for top-down questions and 1.03 times per question for bottom-up ones. This means that the students on the average use at least one strategy per question for both texts.

5.5 Problems and question types

From reading comprehension task 2, editorial texts, it is apparent that the students encountered many problems in trying to comprehend these texts. In this part, the problems from the completed task as well as the problems related to student groups based on their English competency are reported.

5.5.1 Problems

From the responses to the comprehension task, it can be concluded that the students have several problems when reading both types of editorial text. The problems found from reading editorial texts and described in the interview are categorised into four categories as follows:

General problems

P1 cannot understand the word(s) in the question or cannot find the answer

P2 can find the answer but cannot explain in his/her own words or exact quote

P3 can answer only part of the question

P4 uses content schema instead of reading

Grammar problems

P5 parts of speech

P6 recognising English word order i.e. adjective + noun

P7 problems with breaking up words into prefix / root

P8 problems with singular / plural (*not found in editorial texts*)

P9 problems with pronouns and possessive pronouns

P10 grammar problems with double, participial adjective (*not found in editorial texts*)

P11 problems with tenses

P12 grammar problems about subject / verb agreement

P13 passive voice

P14 problems with verbs after preposition; participle / gerund (*not found in editorial texts*)

Problems with punctuation

P15 problems with apostrophe (*not found in editorial texts*)

P16 problems with phrase in apposition and relative clause between two commas

P17 punctuation: commas, semicolon

Problems with linkage

P18 conjunction (*not found in editorial texts*)

P19 problems with reference words: (personal, relative, possessive) pronouns

In this case of reading comprehension of editorial texts, the students sometimes have more than one problem for the same question. Therefore, the crosstabulation by means of SPSS program is used to analyse the problems found while reading editorial texts. The results are based on the numbers of responses for each problem as illustrated in Tables 45 and 46.

For the Thai context text, thirteen problems are found as obstacles for comprehending the text. The first and the second most common problems for this text are general problems that the students cannot understand the word(s) in the question or cannot find the answer and that they answer only part of the question. These account for about two-fifths and one-sixth of the number of all responses respectively. Problems with reference words, with ability to find the answer but cannot explain in their own words or the resort to an exact quote are also found in this text. Problems with parts of speech, with breaking up words into prefix/root and with punctuation are rarely found. Minor problems mentioned are those with tenses, with pronouns, with the form of subject/verb agreement, with passive voice and with phrase apposition or relative clauses between two commas. In addition, around one-fifth of the respondents mention experiencing no problems. The results are shown in Table 45.

Table 45 Problems with the Thai context editorial text

<u>Problems</u>	<u>Frequency</u>	<u>Percentage</u>
<u>General Problems</u>		
P1 Can't understand word(s)	87	39.6
P3 Answer only part	36	16.4
P2 Exact quote	11	5.1
<u>Problems with Linkage</u>		
P19 Reference	14	6.4
<u>Grammar Problems</u>		
P5 Parts of speech	6	2.7
P7 Prefix / suffix	6	2.7
P11 Tenses	3	1.3
P9 Pronouns	1	.4
P12 Subject / verb agreement	1	.4
P13 Passive voice	1	.4
<u>Problems with Punctuation</u>		
P17 Punctuation, commas, semicolon	5	2.3
P16 Phrase in apposition	1	.4
P0 No problem	48	21.9
Total	220	100.0

For the non-Thai editorial text, eleven problems belonging to three categories are found as barriers for comprehending the text. The first and the second most common problems for the non-Thai context text are general problems that the students cannot understand the word(s) in the question or cannot find the answer and can answer only part of the question. These account for slightly less than half of the number of all

responses for the former problem and around fifteen percent for the latter. The next most frequent problems are a problem with linkage about reference words and a general problem with the ability to find the answer but cannot explain in their own words or the resort to an exact quote. Problems with parts of speech are also fairly frequently mentioned. At the other end of the scale, minor problems for comprehending the text are those with using content schema instead of reading, with tenses, with word order, with subject/verb agreement and with passive voice. However, there is no evidence for problems with punctuation mentioned for this text. With this text, around nine percent of the respondents mentioned having no problems. The results are illustrated in Table 46.

Table 46 Problems with the non-Thai context editorial text

<u>Problems</u>	<u>Frequency</u>	<u>Percentage</u>
<u>General Problems</u>		
P1 Can't understand word(s)	101	47.6
P3 Answer only part	32	15.1
P2 Exact quote	20	9.4
P4 Use content schema	1	0.4
<u>Problems with Linkage</u>		
P19 Reference	26	12.2
<u>Grammar Problems</u>		
P5 Parts of speech	9	4.2
P11 Tenses	2	.9
P6 Word order	1	.4
P12 Subject / verb agreement	1	.4
P13 Passive voice	1	.4
P0 No problem	19	9.0
Total	213	100.0

The next tables show the relationship between the problems with the students in each group, low, medium and high. The crosstabulation for multiple responses by means of the SPSS program is used to analyse the relationship between these. For the Thai context text, Thai politics, it can be seen that all groups of the students have the same foremost general problem that is the problems that they cannot understand the word(s) in the question or cannot find the answer but the percentages of this problem for the low group is the highest one followed by the medium group. The second frequent problem for all groups is a general problem with answering only part of the questions but the students in the high group tend to have this problem more than the others. For the students in the high group, the other major problem is a problem with linkage about using reference

words whereas a general problem with resorting to an exact quote is one of major problems for the students in the medium group. The problem with linkage about reference words is also a major one for the low group. At the other end of the scale, minor problems for the high group are problems with resorting to exact quotes, with prefix and suffix, with punctuation and with passive voice. For the medium group, minor problems are those with parts of speech, with pronouns, with subject/verb agreement and with phrases in apposition or relative clauses between two commas, whereas those with parts of speech, with prefix and suffix and with the resort to an exact quote are minor problems for the low group. However, the percentage of not having problems for the high group is the highest one and the low group with the lowest score, indicating that these students are more aware of their problems. The results are shown in Table 47.

Table 47 Problems for Each group of students, the Thai context editorial text

Problems	Score Groups			Total
	Low	Medium	High	
<u>General Problems</u>				
P1 Cannot understand	16.6	13.5	9.5	39.6
P3 Answer only part	4.7	4.0	7.7	16.4
P2 Exact quote	.8	3.5	.8	5.1
<u>Problems with Linkage</u>				
P19 Reference	2.4	1.6	2.4	6.4
<u>Grammar Problems</u>				
P5 Parts of speech	.4	.4	1.9	2.7
P7 Prefix/suffix	.8	1.5	.4	2.7
P11 Tenses	.0	.0	1.3	1.3
P9 Pronouns	.0	.4	.0	.4
P12 Subject/verb agreement	.0	.4	.0	.4
P13 Passive voice	.0	.0	.4	.4
<u>Problems with Punctuation</u>				
P17 Punctuation	.0	1.5	.8	2.3
P16 Phrase in apposition	.0	.4	.0	.4
P0 No problem	5.1	7.3	9.5	21.9
Total	30.8	34.5	34.7	100.0

Correspondingly, the topmost problem for the non-Thai context editorial text is a general problem that the students in all groups, low, medium and high, cannot understand the word(s) in the question or cannot find the answer. Other major problems for all groups are a general problem with answering only part of the question and a problem with linkage about reference words. The students in the high group encounter another

major problem with resorting to an exact quote as well as the students in the medium group. Minor problems for the high group are those with word order and with parts of speech whereas that with tenses is a minor one for the medium group. The students in the low group experience minor problems with the use of content schema instead of reading, with subject/verb agreement and with passive voice. In addition, the students in the high group again reveal the highest percentage for having no problems, whereas fewer of those in the low group agree with them. The results are presented in Table 48.

Table 48 Problems for each group of students, the non-Thai context editorial text

Problems	Score Groups			Total
	Low	Medium	High	
<u>General Problems</u>				
P1 Can't understand	16.1	17.9	13.6	47.6
P3 Answer only part	4.8	2.8	7.5	15.1
P2 Exact quote	1.4	4.8	3.2	9.4
P4 Use content schema	.4	.0	.0	.4
<u>Problems with Linkage</u>				
P19 Reference	5.2	4.2	2.8	12.2
<u>Grammar Problems</u>				
P5 Parts of speech	1.9	1.4	.9	4.2
P11 Tenses	.0	.9	.0	.9
P6 Word order	.0	.0	.4	.4
P12 Subject/verb agreement	.4	.0	.0	.4
P13 Passive voice	.4	.0	.0	.4
P0 No problem	.4	3.3	5.3	9.0
Total	31.0	35.3	33.7	100.0

The results from Tables 45, 46, 47 and 48 indicate that the students in all groups have several problems which obstruct their understanding of editorial texts. The major problems for both texts, the Thai and the non-Thai ones, are general ones, the foremost being that the students cannot understand the word(s) in the question or cannot find the answer. Likewise, this problem is also the topmost one for students in all groups, especially for those in the low group. Another major problem for both texts is the problems with answering only part of the question, especially for the students in the high group. Besides, the students have a much higher percentage for not admitting to problems for the Thai context text than the non-Thai one. In addition, the students in the high group indicate the highest frequency of this, whereas those in the low group have the lowest one.

5.5.2 Problems and question types

In this study, the problems vary with question types of the texts, top-down and bottom-up. As a result, this section is concerned with the relationship between problems and question types. The problems are distinguished into two question types, top-down and bottom-up.

5.5.2.1 Top-down problems

For the Thai context editorial-text, the results show that the foremost top-down problem is a general problem with not understanding the word(s) in the question or not finding the answer. The other major ones are a general problem with answering only part of the question and a problem with linkage about using reference words. The problems with resorting to an exact quote and with using punctuation are found occasionally. For minor problems, only a few experienced problems with pronouns, with tenses, with subject/verb agreement and with phrase in apposition or relative clauses between two commas. Additionally, around one-fifth of the respondents mentioned having no problems for top-down questions. The results are illustrated in Table 49.

Table 49 Top-down problems, the Thai context editorial text

<u>Problems</u>	<u>Frequency</u>	<u>Percentage</u>
<u>General Problems</u>		
P1 Can't understand word(s)	21	24.7
P3 Answer only part	17	20.0
P2 Exact quote	8	9.4
<u>Problems with Linkage</u>		
P19 Reference	14	16.5
<u>Problems with Punctuation</u>		
P17 Punctuation	3	3.5
P16 Phrase in apposition	1	1.2
<u>Grammar Problems</u>		
P9 Pronouns	1	1.2
P11 Tenses	1	1.2
P12 Subject/verb agreement	1	1.2
P0 No problem	18	21.2
Total	85	100.0

For the non-Thai editorial text, the topmost problem of top-down question for the non-Thai context text is the problem with linkage about reference words. This accounts for around one-third of the number of all responses. The other major problems are general problems with answering only part of the question and with not understanding the word(s) in the question or not finding the answer. The problem with resorting to an exact quote is fairly frequently mentioned. Furthermore, minor problems for this question type are those with tenses and with subject/verb agreement. In addition, a few of the respondents mentioned having no problems. The results are displayed in Table 50.

Table 50 Top-down problems, the non-Thai context editorial text

<u>Problems</u>	<u>Frequency</u>	<u>Percentage</u>
<u>Problems with Linkage</u>		
P19 Reference	26	31.7
<u>General Problems</u>		
P3 Answer only part	25	30.5
P1 Can't understand word(s)	17	20.7
P2 Exact quote	7	8.5
<u>Grammar Problems</u>		
P11 Tenses	1	1.2
P12 Subject/verb agreement	1	1.2
P0 No problem	5	6.1
Total	82	100.0

When compared, the results from Tables 49 and 50 point to the fact that the students have the same major problems for both texts, that is general problems with not understanding the word(s) in the question or not finding the answer, with answering only part of the question and with using reference words. The first mentioned problem is found more often in the Thai context text than the non-Thai one whereas the second and the last problems are conversely found. The problem with resorting to an exact quote is found somewhat in both texts. Likewise, problems with tenses and with reference words are minor problems in both texts but those with pronouns, with subject/verb agreement, with phrase in apposition or relative clauses between two commas and with punctuation are found in only the Thai text. Additionally, the students have fewer top-down problems for the Thai context text than for the non-Thai one.

5.5.2.2 Bottom-up problems

Students also show their weaknesses in relation to bottom-up skills with reading editorial texts. For the Thai context text, three categories of problems are mentioned. The foremost problem is a general problem with not understanding the word(s) in the question or not finding the answer. This accounts for around half of the number of all responses. The other major problem is also a general one, with answering only part of the question. A few mention the problems with parts of speech and with prefix and suffix. Minor problems of bottom-up questions for the Thai context text are those with the resort to an exact quote, with tenses, with passive voice, with punctuation and. In addition, around one-fourth of the respondents mention having no problems. The results are presented in Table 51.

Table 51 Bottom-up problems, the Thai context editorial text

<u>Problems</u>	<u>Frequency</u>	<u>Percentage</u>
<u>General Problems</u>		
P1 Cannot understand word(s)	66	48.9
P3 Answer only part	19	14.2
P2 Exact quote	3	2.2
<u>Grammar Problems</u>		
P5 Parts of speech	6	4.4
P7 Prefix / suffix	6	4.4
P11 Tenses	2	1.5
P13 Passive voice	1	.7
<u>Problems with Punctuation</u>		
P17 Punctuation	2	1.5
P0 No problem	30	22.2
Total	135	100.0

For the non-Thai context text, two categories of problems are reported. The foremost problem for bottom-up questions is a general problem about not understanding the word(s) in the question or not finding the answer. This appears in around two-thirds of all responses. The other prominent one is about resorting to an exact quote. The problems with using parts of speech and with answering only part of the question are found occasionally. Besides, only a few mention using content schema. The other minor ones are those with word order, with tenses and with passive voice. In addition, around ten percent of the respondents mention no problems. The results are presented in Table 52.

Table 52 Bottom-up problems, the non-Thai context editorial text

Problems	Frequency	Percentage
<u>General Problems</u>		
P1 Cannot understand word(s)	84	64.1
P2 Exact quote	13	10.0
P3 Answer only part	7	5.3
P4 Use content schema	1	.8
<u>Grammar Problems</u>		
P5 Parts of speech	9	6.7
P6 Word order	1	.8
P11 Tenses	1	.8
P13 Passive voice	1	.8
P0 No problem	14	10.7
Total	131	100.0

The results from Tables 51 and 52 point to the fact that the students show weaknesses when they cannot understand word(s) in the question or cannot find the answer. Answering only part of the question is the important problem for the Thai context text, whereas that with resorting to an exact quote is the major one for the non-Thai context text. Additionally, the students have fewer bottom-up problems for the Thai context text than for the non-Thai one.

5.6 Summary

This chapter reports the analysis of the relationship between the preference of text types and scores, text types and scores, strategies and question types, strategies and scores and question types and problems from reading editorial texts.

Around four-fifths of the students prefer the Thai context text and one-fifth prefer the non-Thai one. The mean scores of the Thai context text are higher than the non-Thai one for both groups for preference of text type. The preference of text has a positive effect on the preference of the Thai context text but the scores for the non-Thai context text in relation to the text preference are not related in a positive way. Therefore, we can conclude in this case that a culturally familiar text, the Thai one, has more effect on student comprehension than preference of text type. When a mixed factorial ANOVA was used to analyse the differences, the effect of text type was highly statistically significant ($p < 0.001$), but the main effect of preference was not significant ($p > .05$), and no interaction was found between preference and text type ($p > .05$). This means that the

overall task mean scores for the Thai context text regardless of text preference are higher than those for the non-Thai one.

The scores in all aspects, total task scores, question scores and sentence scores for both texts are lower than fifty percent. Moreover, when a paired sample T-test was used to analyse the differences between the scores of the Thai and the non-Thai context texts for editorial texts, the results show that there are statistically significant differences ($p < .05$) between two texts for task scores and question scores but there are no statistically significant differences ($p < .05$) between two texts for sentence scores.

For the question types, the scores of cohesive questions are the highest ones whereas the scores of literal questions are the lowest ones. Even though the scores of cohesive questions for the Thai text are high, those for the non-Thai one are rather low. The students have major problems with literal questions for the non-Thai text and with figurative and global questions in both the Thai and the non-Thai texts, especially for the non-Thai one. Overall, the means for bottom-up processes are lower than those of top-down processes in editorial texts and the overall scores for these are still lower than fifty percent.

In relation to the role the Thai language plays in reading editorial texts, sixty-five percent of the students make strategic use of the Thai language to assist their comprehension for both texts. Another thirty-five percent use both Thai and English to facilitate their comprehension. For the frequency use of Thai to assist the student comprehension, it is apparent that the students tend to rely on the strategic use of Thai slightly more often for the non-Thai context text than the Thai one. Moreover, they tend to use Thai more often for bottom-up questions for both texts.

Of the eight strategies that are used for this type of text, the top most strategy for both texts, is the use of Thai to examine or think about the context of word or phrase or to guess the meaning from context. Likewise, it is also the topmost strategy for top-down and bottom-up questions for both texts. This strategy is also the most important one which affects the production of better answers for both texts. The other essential strategies for these sorts of answers are those to understand the meaning of the sentence or find a reason for both texts, to translate the word or phrase itself for the Thai context text, and to summarise ideas for the non-Thai one. The strategies of using formal schema and content schema affect the better answers for both texts as revealed by both single and

multiple strategy usage. Moreover, those of double and triple strategies are very useful when students cannot use a single strategy to find a correct answer. The essential multiple strategies for the Thai context text are the combination of the use of formal schema and other strategies and the combination of the use of content schema and other strategies. Furthermore, the combination of the use of formal schema with another is a prominent one for the non-Thai context as well.

In relation to the problems encountered when reading editorial texts, there are several general problems, grammar problems, problems with punctuation and problems with linkage. The foremost problem for both texts emerges from a vocabulary deficit in that the students cannot understand the word(s) in the question or cannot find the answer. This problem is also the foremost problem for top-down skills in the Thai context text and for bottom-up skills in both texts whereas the problem with answering only part of the question is the foremost problem for top-down skills in the non-Thai text. Other major problems are those with using reference words for top-down skills in both texts, with answering only part of the sentence for top-down skills in both texts and for bottom-up skills in the Thai context text, and with resorting to an exact quote for bottom-up skills in the non-Thai context text.

Moreover, when the different groupings are examined, the problem that the students cannot understand the word(s) in the question or cannot find the answer is also the top most one for students in all groups, especially for those in the low group. Besides, the students admit fewer problems for the Thai context text than the non-Thai one, while those in the high group are more prominent in this regard than those in the low group.

The results in this chapter point to the fact that the students have low outcomes in relation to both top-down and bottom-up skills for editorial texts even though they use Thai language based strategies to assist their comprehension.

The next chapter will report on the analysis of the experiential texts.

CHAPTER SIX

READING COMPREHENSION

AND

NARRATIVE EXPERIENTIAL TEXTS

Chapter six reports the data analysis of reading comprehension of experiential biographical. The Thai context text was taken from a Thai teacher's account of her life (Thirabutana, 1971) and the non-Thai context text was taken from the story of an American woman's life (Keller, 1961). Twenty students completed reading comprehension task 3 which consisted of questions about these two texts, a culturally familiar text or a Thai context text, and a culturally unfamiliar text or a non-Thai context text. In this chapter, the relationships between scores and text type preferences, scores and text types, and scores and question types are presented. After the identification of strategies used by the students, the relationships between these strategies and scores as well as question types are discussed. Finally, problems mentioned by the students in comprehending the narrative experiential texts are categorised and then related to top-down and bottom-up questions.

6.1 Preference of text types and scores

This part of the chapter relates to the relationship between the preference of text types and the scores of reading comprehension task 3, experiential texts. The results, calculated by using the SPSS program, are displayed in a pie graph and a table accompanied by a short explanation of the result.

6.1.1 Preference for text type

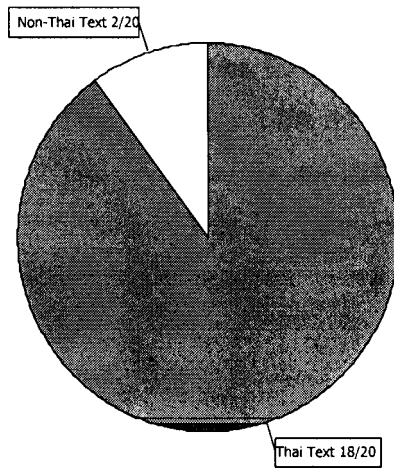


Figure 16 Numbers of students for text type preference, experiential texts

This figure shows that ninety percent of the students prefer the Thai context text whereas the other ten percent expressed a preference for the non-Thai one.

6.1.2 Preference for text type and scores

The preferences for the two text types, the Thai context text and the non-Thai context text, related to mean scores in each preference group are displayed in Table 53.

Table 53 Mean overall scores of reading comprehension task 3, experiential texts, for the Thai and non-Thai context texts in each preference group

Preference		Text	Mean	N	Std. Deviation
Thai Text	Pair 1	Thai Text	14.11	18	2.56
		Non-Thai Text	9.05	18	2.92
Non-Thai Text	Pair 2	Thai Text	11.75	2	3.18
		Non-Thai Text	9.25	2	2.47

Table 53 shows the means of each text for each group of students. The scores for the Thai context text are higher than the scores for the non-Thai context text according to the preferences expressed for the two texts. Ninety percent of the students prefer the Thai context text and they can obtain higher scores for that text. Only ten percent of them report a preference for the non-Thai context text but the scores for it are lower than for the Thai one. Nevertheless, standard deviations for the Thai context text in the preference of Thai text group are lower than the non-Thai one. Conversely, standard deviations for the Thai context text in the preference of non-Thai text group are higher than the non-Thai one.

The analysis indicates the fact that the preference of the text may have a positive effect in the case of the Thai context text, but the scores of the small number preferring the non-Thai one show no such effect. Even though a few students prefer the non-Thai context text, the scores for the Thai one are still higher than the non-Thai one. It means that topic familiarity may have a greater influence on reading comprehension than preference of text type. Moreover, if we observe the gap between the means of both texts for the non-Thai context text preference group, the scores of the Thai one are still higher than the non-Thai one.

The analysis in this case has revealed an anomaly. Preference for the Thai context text is closely connected to scores for that text but this is not the case for the non-Thai context text. In relation to the latter, preference did not result in higher scores. Consequently, we can conclude in this chapter that a culturally familiar text, the Thai one, has more effect on student comprehension than preference of text type.

This is confirmed by the results of a mixed factorial ANOVA using preference for experiential texts as the between-subjects factor and text type as the within-subjects factor. That is, although the effect of text type was highly significant ($F_{(1,18)} = 11.861, p = 0.003$), the main effect of preference was not significant ($F_{(1,18)} = 0.389, p = 0.541$), and no interaction was found between preference and text type ($F_{(1,18)} = 1.375, p = 0.259$). This means that the overall task mean scores for the Thai context text regardless of text preference are higher than those for the non-Thai one.

6.2 Experiential texts and scores

The students completed reading comprehension task 3 which consisted of the two experiential autobiographical texts, the Thai and American narratives. This was followed by ten open-ended questions to be answered and one sentence, the meaning of which was to be explained in Thai. The overall scores from reading both experiential texts are illustrated in Table 54.

Table 54 Overall scores for reading comprehension task 3, experiential texts

Score Types	Total Scores	Minimum	Maximum	Mean	Std. Deviation
Task Scores	50	14.50	30.50	22.95	4.58
Question Scores	40	11.50	25.00	18.15	3.58
Sentence Scores	10	2.00	7.00	4.80	1.80

Table 54 shows the overall scores for experiential texts. Sentence mean scores and question mean scores are slightly lower than half of the total. When combined sentence scores and question scores together, therefore, the task scores are slightly lower than fifty percent of the total. However, the maximum scores for each score type are higher than fifty percent whereas the minimum scores are much lower than fifty percent. Moreover, standard deviation for task scores is higher than those of question and sentence scores.

The results show that students gain low scores of under fifty percent for these experiential texts.

6.3 Context types, question types and scores

This part focuses on the findings from the data analysis on the relationships between context and question types and scores. The results are displayed in bar graphs and tables together with a brief explanation of the results.

6.3.1 Context types and scores

The students completed reading comprehension task 3 which consisted of two experiential autobiographical texts. This was followed by ten open-ended questions to be answered and one sentence, the meaning of which was to be explained in Thai. The scores from reading these two texts are different according to the type of text. Descriptive statistics are reported in Table 55.

Table 55 Task, question and sentence mean scores for experiential texts

Text	Total Scores	Minimum	Maximum	Mean	Std. Deviation
Thai Text Task Score	25	9.50	18.00	13.87	2.64
Non-Thai Text Task Score	25	4.00	14.50	9.07	2.82
Thai Text Question Score	20	7.00	15.00	11.07	2.11
Non-Thai Text Question Score	20	3.50	12.00	7.07	2.06
Thai Text Sentence Score	5	1.00	4.50	2.80	1.10
Non-Thai Text Sentence Score	5	.00	4.00	2.00	1.26

Table 55 displays a comparison between the scores for the two experiential texts in all aspects. The mean overall task scores, question scores and sentence scores of the Thai experiential text, Thai narrative, are slightly higher than fifty percent but those of the non-Thai one, American narrative, are lower than fifty percent. Even though the range of scores for both texts is somewhat similar, obvious differences appear when the maximum and the minimum scores are examined. The maximum scores for all aspects of the Thai context text are much higher than fifty percent whereas the minimum scores for those are very low. The minimum scores for sentences of the non-Thai text drops to zero and those for questions and task are very low as well. However, both maximum and minimum scores of the Thai context text are higher than the non-Thai one. Moreover, the

standard deviation for the non-Thai text scores in almost all aspects is slightly larger than that for the Thai context text except that for question scores.

These results suggest that the students, however, in this study performed at a higher level for the familiar text, the Thai context text, than when dealing with a text about an unfamiliar subject.

A paired sample T-test was used to analyse the differences between the scores of the Thai and the non-Thai context texts for experiential texts. The results show that there were statistically significant differences ($p < .05$) between the two texts in all aspects, total task scores ($t = 7.225$, $df = 19$, $p < 0.001$, two-tailed), question scores ($t = 8.312$, $df = 19$, $p < 0.001$, two-tailed), and sentence scores ($t = 2.230$, $df = 19$, $p = 0.032$, two-tailed).

6.3.2 Question types and scores

The ten open-ended questions for each text in the task comprise four categories of question type, that is, literal, figurative, global and cohesive. Differences in these question types may cause varying difficulties for students trying to comprehend the texts. The nature of the responses to these differing questions can be seen from the percentages of correct answers for each question type.

Overall for both experiential texts, the highest scores are attained with cohesive questions followed by those with literal questions whereas the lowest ones are gained with figurative questions. Nonetheless, those of global questions are slightly higher than those of figurative ones and slightly lower than those of literal ones. In addition, the scores of cohesive ones are much higher than those of literal ones as shown in Figure 17.

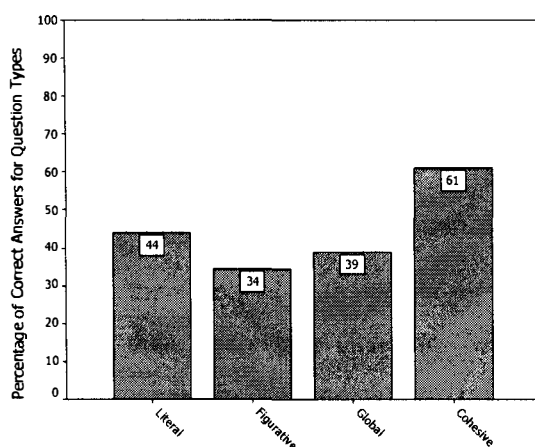


Figure 17 Percentage correct for each question type of experiential texts

When the results are compared for the four different question types from both experiential texts, the results show that students attained higher scores for the Thai context texts in all question types than those for the non-Thai context text. Moreover, the scores of cohesive questions for the Thai context text are high at eighty-four percent whereas those of the literal one for the same text are only slightly above fifty percent. However, the scores of figurative and global questions for the Thai context text are lower than fifty percent as well as the scores for the non-Thai context text in all question types as illustrated in Figure 18.

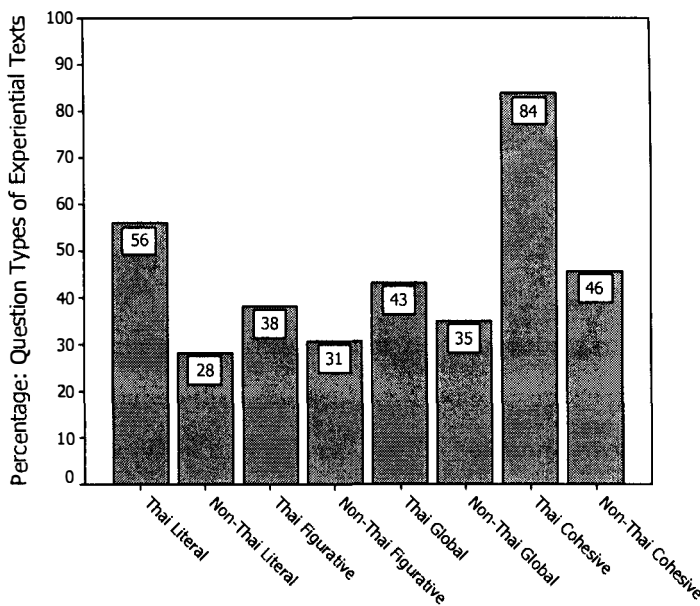


Figure 18 Percentage correct for each question type Thai and non-Thai experiential texts

According to the models of the reading process, literal and figurative questions relate to bottom-up operations, which start with the small units and end with the larger units of meaning. Conversely, global and cohesive questions are part of the top-down category, which begins with the largest units and ends with the smaller ones (Cohen, 1994a, 213-214; Dubin, Eskey, & Grabe, 1986, 11-13; Paran, 1997, 1-3).

In relation to Figure 18, the scores of both bottom-up and top-down questions in the Thai context text are higher than for the non-Thai one. Moreover, the scores of both bottom-up and top-down questions in the Thai context text are fifty percent and higher than fifty percent, respectively. On the other hand, those of the non-Thai ones are lower than fifty percent as displayed in Figure 19.

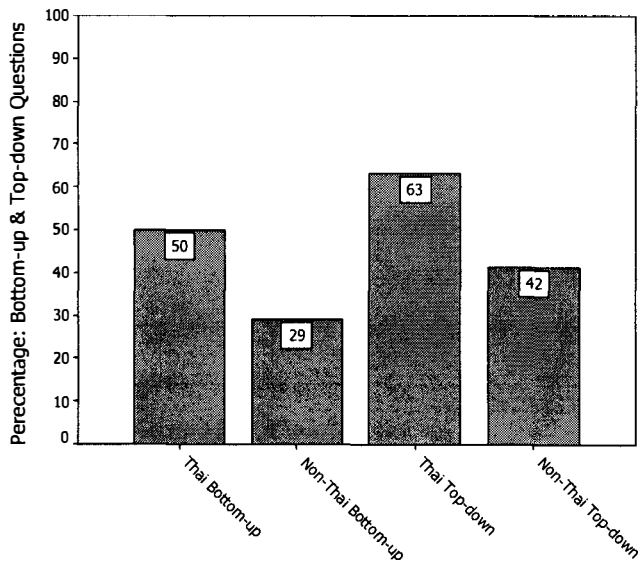


Figure 19 Percentage correct of bottom-up and top-down questions for each text, experiential texts

When put together as shown in Figure 20, total scores of top-down questions for experiential texts are higher than the scores of bottom-up questions. Furthermore, the former are slightly higher than fifty percent but the latter are lower than fifty percent.

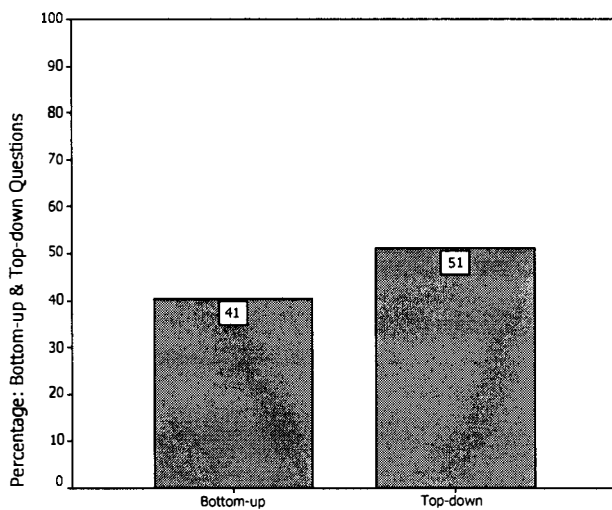


Figure 20 Percentage correct of bottom-up and top-down questions of experiential texts

As indicated in Figures 17, 18, 19 and 20, the scores of cohesive questions are the highest ones whereas the scores of figurative questions are the lowest ones. Even though the scores of literal and global questions are higher than those of figurative ones, they are still lower than fifty percent. Moreover, the scores of cohesive and literal questions for the Thai context text are higher than fifty percent but those for the non-Thai context text are still lower than fifty percent, especially literal ones for the latter are the lowest ones. The students have major problems with literal questions for the non-Thai context text which can be regarded as being related to the operation of bottom-up skills. Students also gain very low scores with figurative and global questions in both the Thai and the non-Thai texts, especially for the non-Thai. Overall, the means for bottom-up skills are lower than those of top-down skills in these experiential texts.

The results indicate that student reading skills need to be enhanced for experiential texts with literal questions, the meaning of figurative language and global questions for both Thai and non-Thai context texts. Besides, cohesive questions for the non-Thai text are problems to the comprehension of the experiential texts as well.

6.4 Strategies related to scores and question types

After answering each open-ended question in reading comprehension task 3, experiential texts, the students were asked to write down the reasons for selecting the answer that they gave for each question. Additionally, soon after completing the task for each text, the students engaged in a retrospective interview which was concerned with the strategies used to make a decision for each answer. The strategies connected with the use of Thai from both the open-ended questions and the interviews are analysed here and the results are shown in tables and text.

6.4.1 Strategies of using Thai

From the task and the interview, it appears that students when accessing their own language use several strategies to help them comprehend experiential texts. Statements about these strategies are compacted into eight strategies as follows:

S1 to translate a word or a phrase itself

S2 to examine or think about the context of words or phrases or guess the meaning from context

S3 to understand the meaning of the sentence or find a reason

S4 to confirm the reader understands about the sentence

S5 to compare the English with the Thai grammar by using formal schema

S6 to access or find the reader's ideas by using content schema

S7 to construct or formulate ideas

S8 to summarise ideas

S0 no use of Thai

The strategies used for comprehending experiential texts can be seen as in the following sample statements from the students, transcribed from the retrospective interviews (all names in the transcript have been changed to keep identities confidential). In each case the type of question is mentioned in brackets following the statement.

Example 1

S1: to translate a word or a phrase itself

(From Task 3 Text 1: Thai Narrative, Question 4, Figurative Question)

Question: What is the meaning of "to memorise by heart" in line 10?

Reviewer: How did you get the meaning of this phrase?

S04D: I translated the phrase into Thai.

Reviewer: Why did you translate into Thai?

S04D: Because when I looked at these words, I could translate all of them into Thai. Then I read the text again in order to check the meaning of them in the text again.

Example 2

S1: to translate a word or a phrase itself

(From Task 3 Text 2: American Narrative, Question 4, Figurative Question)

Question: What is the meaning of “monkey-like imitation” in line 10?

Reviewer: Have you known the meaning of this phrase before?

S03C : *No, I haven't. It was difficult to tell the meaning of this phrase. I knew the meaning of some words in this phrase but I didn't know the meaning of it when these words were put together.*

Reviewer: How did you get the answer?

S03C : *I tried to translate word by word and then linked them together in Thai again.*

Reviewer: Why did you think in Thai?

S03C : *Because this phrase was very difficult to understand the meaning so I tried to translate the easy words first. I used easy words to interpret difficult words later*

Example 3

S2: to examine or think about the context of words or phrases or guess the meaning from context

(From Task 3 Text 1: Thai Narrative, Question 6, Literal Question)

Question: What does the verb “to wade” in line 4 mean?

Reviewer: How did you get the answer?

S06F : *After reading the text, I translated the sentence into Thai and then guessed the meaning of the word “to wade” from the text.*

Reviewer: Why did you have the process of thinking like this?

S06F : *I did like this in order to get the correct meaning of the word from the text.*

Example 4

S2: *to examine or think about the context of words or phrases or guess the meaning from context*

(From Task 3 Text 2: American Narrative, Question 6, Literal Question)

Question: *What does adjective “uncomprehending” in line 11 mean?*

Reviewer: *How did you get this answer?*

S01A : *I tried to think in Thai.*

Reviewer: *Why did you think in Thai?*

S01A : *For my understanding and it helped me find another word which has the same meaning to this word.*

Reviewer: *How did you find the meaning of the word “uncomprehending”?*

S01A : *I added prefix “un” to the word “comprehend” which mean “understand” so I could find the meaning of the word “uncomprehending.*

Example 5

S3: *to understand the meaning of the sentence or find a reason*

(From Task 3 Text 1: Thai Narrative, Question 5, Literal Question)

Question: *How did they get to school if they did not walk?*

Reviewer: *How did you get this answer?*

S07G : *I read from the text.*

Reviewer: *Did you think in English?*

S07G : *No, I thought in Thai.*

Reviewer: *Why did you think in Thai?*

S07G : *Because Thai helped me understand the meaning of the sentence and then I could find the answer. When I thought in Thai, I felt confidence about my answer.*

Example 6

S3: *to understand the meaning of the sentence or find a reason*

(From Task 3 Text 2: American Narrative, Question 7, Literal Question)

Question: *What does Helen mean by saying she did not know everything has a name for several weeks?*

Reviewer: *How did you get the answer?*

S06F : *I thought in English first and then translated into Thai?*

Reviewer: *Why?*

S06F : *Because I could not find the answer in the text so I need to analyse and interpret the sentence for understanding.*

Example 7

S4: *to confirm the reader understands about the sentence*

(From Task 3 Text 1: Thai Narrative, Question 9, Cohesive Question)

Question: *The word “which” in line 6 refers to...*

Reviewer: *How did you get the answer?*

S06F : *I thought in English first and then translated it into Thai and thought in Thai again.*

Reviewer: *Why?*

S06F : *To make sure about the answer.*

Example 8

S4: *to confirm the reader understands about the sentence*

(From Task 3 Text 1: American Narrative, Question 1, Global Question)

Question: *According to the passage, what happened at the first meeting between the writer and her teacher?*

Reviewer: *How did you get the answer for this question?*

S17Q : *I read from the text.*

Reviewer: *Did you think in Thai or English?*

S17Q : *Firstly, I thought in English because I understood the question and I could find the answer easily. Then I thought in Thai again in order to confirm my understanding about the text and my answer.*

Example 9

S5: *to compare the English with the Thai grammar by using formal schema
(From Task 3 Text 1: Thai Narrative, Question 7, Literal Question)*

Question: *What did the children sing on the way to school?*

Reviewer: *How did you get the answer for this question?*

S20T: *I tried to compare Thai structure to English structure for finding the answer because I didn't know the meaning of some words in the sentence*

Reviewer: *Was it the same or different from Thai structure?*

S20T: *It was the same structure so I could understand the sentence easily*

Example 10

S5: *to compare the English with the Thai grammar by using formal schema
(From Task 3 Text 1: American Narrative, Question 10, Cohesive Question)*

Question: *The word "them" in line 11 refers to...*

Reviewer: *How did you get the answer?*

S1SR: *I've learned about this the structure before. I thought in Thai first and then compared the English structure to the Thai structure. It helped me much to find the correct answer.*

Example 11

S6: *to access or find the reader's ideas by using content schema
(From Task 3 Text 1: Thai Narrative, Question 2, Global Question)*

Question: *Why did the teacher punish the writer and her friends?*

Reviewer: *How did you get the answer for this question?*

S01A: *I used my experience about being punished by the teacher when I was young to understand the text. After reading the question, I found out the answer from the text.*

Example 12

S6: to access or find the reader's ideas by using content schema

(From Task 3 Text 2: American Narrative, Question 5, Literal Question)

Question: Why did Helen stretch out her hand in line 1?

Reviewer: How did you get the answer?

S20T: I read from the text and then thought in Thai I had background knowledge about blind people. They usually use their hands to touch anything.

Reviewer: Did your background knowledge help you answer this question?

S20T: Yes, very much.

Example 13

S7: to construct or formulate ideas

(From Task 3 Text 1: Thai Narrative, Question 1, Global Question)

Question: According to the passage, what were the happy memories of the writer?

Reviewer: How did you get the answer for this question?

S07G: I read from the text. I translated the paragraph into Thai first and then constructed ideas about this paragraph in Thai. Finally, I got the answer in English.

Reviewer: Why did you think and construct ideas in Thai?

S07G: Because it was the easiest method to get the answer.

Example 14

S7: to construct or formulate ideas

(From Task 3 Text 2: American Narrative, Question 9, Cohesive Question)

Question: The word "it" in line 6 refers to...

Reviewer: How did you get the answer?

S12L: I translated into Thai first and then formulated my ideas for the answer. I tried to link the relative pronoun "it" to the preceding word. Then I got the answer by formulating my ideas in Thai.

Example 15

S8: *to summarise ideas*

(From Task 3 Text 1: Thai Narrative, Question 1, Global Question)

Question: *According to the passage, what were the happy memories of the writer?*

Reviewer: *How did you get the answer?*

S16P: *I read the paragraph and thought in Thai*

Reviewer: *Why did you think in Thai?*

S16P: *Because it was a long paragraph so it was hard to find the answer without thinking in Thai. I tried to summarise my ideas about the answer by thinking in Thai and then I got the answer.*

Example 16

S8: *to summarise ideas*

(From Task 3 Text 2: American Narrative, Question 2, Global Question)

Question: *Why hadn't Helen learned to spell words before?*

Reviewer: *How did you get the answer?*

S20T: *It was very difficult to find out this answer so I tried to think in Thai*

Reviewer: *Why did you think in Thai?*

S20T: *Because I could not find the answer in the text so I tried to summarise ideas from the paragraph. I summarised the paragraph to be a simple sentence which I could understand easily.*

Example 17

S0: *no use of Thai to assist comprehension*

(From Task 3 Text 1: Thai Narrative, Question 10, Cohesive Question)

Question: *The word "we" in line 9 refers to...*

Reviewer: *How did you get the answer?*

S02B: *I read the text and got the answer*

Reviewer: *Did you think in Thai or English for this answer?*

S02B: *I didn't think in Thai at all. I thought in English.*

Reviewer: *Why didn't you think in Thai?*

S02B: *Because I knew the answer from the text so I didn't need to think in Thai.*

Example 18

S0: *no use of Thai to assist comprehension*

(From Task 3 Text 2: American Narrative, Question 8, Cohesive Question)

Question: *The word “who” in line 2 refers to...*

Reviewer: *How did you get the answer?*

S05E: *I got the answer from reading the text*

Reviewer: *Did you think in Thai?*

S05E: *No, I didn't think in Thai*

Reviewer: *Why?*

S05E: *Because I could find the answer in the text easily*

In the case of reading comprehension experiential texts, some students report using Thai to support their reading but some students report using strategies for some questions but avoid the use of strategies for some others. The results are shown in Figures 21 and 22.

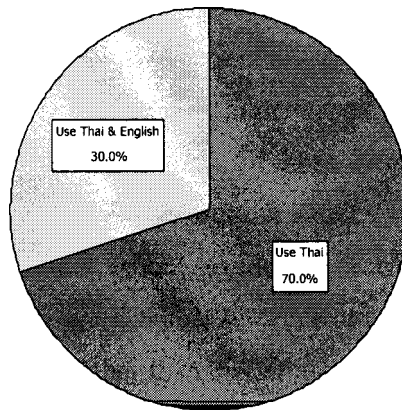


Figure 21 Language usage, the Thai context experiential text

Figure 21 shows that seventy percent of the students use the strategies to assist their comprehension the Thai context experiential text whereas the other thirty percent use Thai and English according to need.

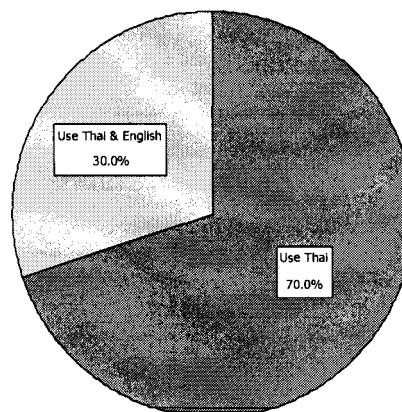


Figure 22 Language usage, the non-Thai context experiential text

Equally, Figure 22 shows that seventy percent of the students report using strategies to facilitate their comprehension for the non-Thai context experiential text whilst thirty percent of them report a mixed use according to need.

In this study, the students sometimes report using more than one strategy while reading. Consequently, a crosstabulation for multiple responses by means of the SPSS program was used to analyse the relationship between the strategies of using Thai while reading related to the student groups for each strategy. The results are illustrated based on the numbers of responses for using each strategy.

In the case of the Thai context experiential texts the results show that almost all students used the Thai language to help their understanding while reading the text. Eight strategies were used for the Thai context text. Of these, around one-third of all responses indicate the students use Thai to examine or think about the context of words or phrases or guess the meaning from context. About seventeen percent of the respondees are using Thai to understand the meaning of the whole sentence or to find a reason. The percentage of using Thai content schema is higher than that of using Thai formal schema to compare the English to the Thai grammar. The number of responses for using Thai to translate the word or phrase itself is slightly higher than those to construct or formulate ideas and summarise ideas. Only a few admit using Thai to confirm the reader's understanding about the sentence. Moreover, the number avoiding using Thai is fairly frequent for the Thai context experiential text. The results are shown in Table 56 where the frequency column refers to number of times a strategy is mentioned and the percentage column shows percentage of the responses.

Table 56 Strategies of Thai usage for the Thai context experiential text

<u>Strategies</u>	<u>Frequency</u>	<u>Percentage</u>
S2 Examine	77	32.4
S3 Understand	41	17.2
S6 Content schema	31	13.0
S5 Formal schema	23	9.7
S1 Translate	16	6.7
S7 Construct Ideas	12	5.0
S8 Summarise Ideas	12	5.0
S4 Confirm	7	2.9
S0 No use of Thai	19	8.0
Total	238	100.0

When the students are divided into three groups based on their performance in this task, low, medium and high, the strategies of using Thai are slightly different from those in Table 56. Thai usage to examine or think about the context of words or phrases or guess the meaning from context and that to understand the meaning of the sentence or find a reason are leading strategies for the students in all groups for the Thai context experiential text. For the students in the high group, the use of content schema is one of major strategies as well as for the students in the medium group. On the other hand, the minor strategy for all groups is that of summarising ideas. The strategy of using Thai to translate the word or phrase itself is also a minor strategy for the medium group whereas those of using Thai to construct or formulate ideas and to access or find the reader's ideas by using content schema are minor ones for the low group. Additionally, the percentage avoiding the use of Thai to support their understanding is fairly evenly found across all groups. The results are displayed in Table 57.

Table 57 Percentage of Thai usage for each group, the Thai context experiential text

Strategies	Score Groups			Percentage
	Low	Medium	High	
S2 Examine	10.5	12.6	9.2	32.4
S3 Understand	6.7	5.5	5.0	17.2
S6 Content Schema	1.3	5.5	6.3	13.0
S5 Formal Schema	2.9	3.8	2.9	9.7
S1 Translate	2.5	1.7	2.5	6.7
S7 Construct Ideas	.4	2.1	2.5	5.0
S8 Summarise Ideas	1.3	1.7	2.1	5.0
S4 Confirm	.0	.0	2.9	2.9
S0 No use of Thai	2.9	2.5	2.5	8.0
Total	28.6	35.3	36.1	100.0

For the non-Thai context experiential text, all students report using Thai to support their comprehension while reading. Eight strategies are used for this text. Slightly higher than two-fifths of the students' responses resort to Thai to examine or think about the context of words or phrases or guess the meaning from context. The second most frequent strategy is the usage of Thai to understand the meaning of the sentence or find a reason. The other major strategies are the use of Thai to construct ideas and the use of Thai formal schema. The strategies of using Thai to translate the word or phrase itself and to summarise ideas are found somewhat. A few use content schema and use Thai to confirm the reader understands about the sentence. In around six percent of instances do students not use Thai for comprehending the text. The results are shown in Table 58.

Table 58 Strategies of Thai usage for the non-Thai context experiential text

Strategies	Frequency	Percentage
S2 Examine	98	41.5
S3 Understand	30	12.7
S7 Construct Ideas	26	11.0
S5 Formal schema	24	10.2
S1 Translate	14	5.9
S8 Summarise	14	5.9
S6 Content Schema	8	3.4
S4 Confirm	6	2.5
S0 No use of Thai	16	6.8
Total	236	100.0

When divided into three groups for low, medium and high scores, the students in all groups report the use of the same leading strategies, the strategy of using Thai to examine or think about the context of word or phrase or guess the meaning from context. The other major strategy for the students in the high group is that of using Thai formal schema to compare the English with the Thai grammar. For the medium group, those of using Thai to construct or formulate ideas and to summarise ideas are major strategies as well. At the opposite end of the scale, the strategy of using Thai content schema to access of find the reader's ideas is a minor strategy for students in all groups. Another minor strategy for the high group is the use of Thai to summarise ideas whereas to confirm the reader understands about the sentence is the other minor one for the students in the medium group. The usage of Thai to translate the word or phrase itself is other minor one for the students in the low group. However, some students in the low and medium groups disregard the strategy of using Thai whereas only a few in the high group forego its use. The results are illustrated in Table 59.

Table 59 Percentage of Thai usage for each group, the non-Thai context experiential text

Strategies	Score Groups			Percentage
	Low	Medium	High	
S2 Examine	14.0	13.1	14.4	41.5
S3 Understand	4.2	4.7	3.8	12.7
S7 Construct Ideas	2.5	5.1	3.4	11.0
S5 Formal Schema	2.1	2.1	5.9	10.2
S1 Translate	1.7	2.1	2.1	5.9
S8 Summarise	.0	4.7	1.3	5.9
S6 Content Schema	1.3	.8	1.3	3.4
S4 Confirm	.0	.4	2.1	2.5
S0 No use of Thai	3.0	2.5	1.3	5.9
Total	28.8	35.6	35.6	100.0

The results from Tables 56, 57, 58 and 59 indicate the fact that most of the students use Thai to facilitate their understanding for both experiential texts. The top most and the second frequent strategies for both texts are the same ones, that is, the use of Thai to examine or think about the context of word or phrase or to guess the meaning from context and to understand the meaning of the sentence or find a reason. Besides, the strategies of using Thai to construct or formulate ideas and the use of Thai formal schema to compare the English with the Thai grammar are the other major strategies for

the non-Thai context text whereas that of using content schema to access the reader's ideas is the essential one for the Thai context text.

Similarly, the students in all groups, low, medium and high use the same leading strategies to help their understanding for both texts, the usage of Thai to examine or think about the context of word or phrase or to guess the meaning from context and to understand the meaning of the sentence or find a reason. Students in the high group report using formal schema for the non-Thai context text more often than the other groups while the strategy of using content schema is prominent for the students in both the high and medium groups for the Thai context text. Moreover, the avoidance of using Thai appears somewhat for both texts but it is slightly higher for the Thai one.

In addition, the frequency of the strategic use for the Thai narrative experiential text and the non-Thai one is equal at 1.10 times per question. This means that the students tend to use more than one strategy to answer each question for both texts.

6.4.2 Strategies and scores

The preceding part shows the results about the frequency of the strategies for experiential texts but does not explain the relationship between the usage of strategies and scores. Thus, the strategies related to scores and strategies and their connection to better answers are reported in this part.

6.4.2.1 Strategies related to scores

According to the marking system, each question is marked out of 2. Where the student is able to comprehend the text and answer the question with at least a reasonable degree of understanding, he/she is likely to gain a score of 2, 1.5 or 1. On the contrary, if he/she is having difficulty with comprehension, his/her mark will be .5 or 0. As it is intended to compare strategies used with scores, the scores will be divided into these two sections as indicated. In this way an identification can be made of what strategies are used for producing the better answers.

The next table shows scores and level of comprehension gained for each answer for the Thai context experiential text. Despite the fact that students use Thai to assist their understanding, around one-third of them still show difficulties with comprehension for this text while the other two-thirds of them show their abilities to comprehend the text. The results are displayed in Table 60.

Table 60 Percentage for high/low scores, the Thai context experiential text

Score	Frequency	Percentage	Comprehension
0	51	25.5	Show non-comprehension
0.5	21	10.5	Show non-comprehension
1	33	16.5	Show comprehension
1.5	25	12.5	Show comprehension
2	70	35.0	Show comprehension
Total	200	100.0	

For the non-Thai context text, around fifty-four percent of the answers show non-comprehension of the text whereas the other forty-six percent of them show the abilities to comprehend the text. The results are displayed in Table 61.

Table 61 Percentage for high/low score, the non-Thai context experiential text

Score	Frequency	Percentage	Comprehension
0	95	47.5	Show non-comprehension
0.5	13	6.5	Show non-comprehension
1	45	22.5	Show comprehension
1.5	8	4.0	Show comprehension
2	39	19.5	Show comprehension
Total	200	100.0	

There are both positive and negative results from the use of Thai to use individual strategies to comprehend the texts. Some students attain high scores from this usage but some gain very low scores or even zero.

For the Thai context text, around thirty-six percent of the items where students use the whole range of strategies are given low scores for their non-comprehension of the text. The other sixty-four percent obtain high scores which show their comprehension of the text. When looking at scores for each strategy, it is apparent that the percentages of the high scores for all strategies are higher than those of the low scores. The results are displayed in Table 62.

Table 62 Strategies of Thai usage related to scores, the Thai context experiential text

Strategies	Low Score (0-.5 Marks)	High Score (1- 2 Marks)	Total
S2 Examine	12.3	20.1	32.4
S3 Understand	7.0	10.2	17.2
S6 Content Schema	4.6	8.4	13.0
S5 Formal Schema	3.5	6.2	9.7
S1 Translate	2.4	4.3	6.7
S7 Construct Ideas	1.5	3.5	5.0
S8 Summarise Ideas	1.8	3.2	5.0
S4 Confirm	.8	2.1	2.9
S0 No use of Thai	2.1	5.9	8.0
Total	36.0	64.0	100.0

For the non-Thai context text, the results show that around fifty-four percent of all answers are given low scores for their non-comprehension of the text whereas the other forty-six percent of them are given the high scores for the abilities to comprehend the text. When looking at scores for each strategy, it is apparent that the percentages of the high scores for almost all strategies are slightly lower than those of the low usage, but those for confirming the reader's understand about the sentence and for summarising ideas have a slightly more positive effect. The results are illustrated in Table 63.

Table 63 Strategies of Thai usage related to scores, the non-Thai context experiential text

Strategies	Low Score (0-.5 Marks)	High Score (1- 2 Marks)	Total
S2 Examine	22.7	18.8	41.5
S3 Understand	6.7	6.0	12.7
S7 Construct Ideas	6.0	5.0	11.0
S5 Formal Schema	5.8	4.4	10.2
S1 Translate	3.2	2.7	5.9
S8 Summarise Ideas	2.7	3.2	5.9
S6 Content Schema	2.0	1.4	3.4
S4 Confirm	1.1	1.4	2.5
S0 No use of Thai	3.8	3.0	6.8
Total	54.0	46.0	100.0

The results from Tables 60, 61, 62 and 63 indicate that the major strategy of using Thai to examine or think about the context of a word or phrase or to guess the meaning from context affects the scores in both positive and negative ways. All strategies used show more a positive effect for the Thai context text than the non Thai one. For the Thai context text, it is apparent that around two-thirds of the responses for overall as well as individual strategy use indicate the ability to comprehend the text whereas the other one-third of them indicate non-comprehension. For the non-Thai context text, slightly less than half of all responses are given the high scores. However, the higher percentages of high scores are linked with the strategies of confirming the reader's understand about the sentence and for summarising ideas but other strategies attract a higher percentage of low scores. This means that the strategies of using Thai help the students to a great extent to obtain scores for the Thai context experiential text, whereas they only moderately help the students for the non-Thai one.

6.4.2.2 Strategies related to better answers

Results to date have shown strategy usage cannot help student's comprehension in all cases. Therefore, the term strategy will now be refined to refer only to useful strategies which affect the learners such a way that they assist in the production of better answers with the scores of one, the score of one and a half, and the score of two. Some students use only one strategy to gain scores while others use double or multiple strategies.

The scores of the Thai experiential text, the Thai narrative, reveal that slightly higher than one-fourth of better answers are influenced by the strategy of using Thai to examine or think about the context of words or phrases or guess the meaning from context. The other essential strategies for achieving higher scores are the strategies of using Thai to understand the meaning of the sentence or find a reason, to translate the word or phrase itself, to compare the English with the Thai grammar or the use of formal schema and to construct or formulate ideas. The others which are involved in the better answers are those of using Thai to confirm what the reader understands about the sentence and to access or find the reader's ideas by using content schema. A few of the better answers involve those of using Thai to summarise ideas. Furthermore, some students use double strategies for producing better scores. An examination of the leading multiple usages reveals that in all

of these cases the strategy whereby students use their content schema (S6) combine with other strategies that is S6+S2 (to use content schema to access or find the reader's ideas and to examine or think about the context of words or phrases or guess the meaning from context), S6+S3 (to use content schema to access or find the reader's ideas and to understand the meaning of the sentence or find a reason), S6+S5 (to use content schema to access or find the reader's ideas and to use Thai formal schema to compare the English with the Thai grammar), S6+S7 (to access or find the reader's ideas by using content schema and to construct or formulate ideas) and S6+S8. The other essential one is the combination of using Thai to summarise ideas (S8) and other strategies that is S8+S2 (to summarise ideas and to examine or think about the context of words or phrases or guess the meaning from context) and S8+S6 (to summarise ideas and to use content schema to access or find the reader's ideas). In addition, around thirteen percent of better answers involve those for which the students do not use any strategy. The results are shown in Table 6-4.

Table 64 Strategies related to better answers, the Thai context experiential text

Single Strategy Use	Usage Percentage
S2 - to examine or think about the context of words or phrases or guess the meaning from context	27.4
S3 - to understand the meaning of the sentence or find a reason	14.1
S1 - to translate the word or phrase itself	7.0
S5 - to use Thai formal schema to compare the English with the Thai Grammar	6.2
S7 - to construct or formulate ideas	5.5
S4 - to confirm the reader understands about the sentence	3.9
S6 - to use content schema to access or find the reader's ideas	3.1
S8 - to summarise ideas	2.5
S0 - no reference to strategy use	13.2
Multiple Strategy Use	
S6+S3 - to use content schema to access or find the reader's ideas and to understand the meaning of the sentence or find a reason	3.1
S6+S2 - to use content schema to access or find the reader's ideas to examine or think about the context of words or phrases or guess the meaning from context	2.5
S6+S5 - to use content schema to access and or find the reader's ideas to use Thai formal schema to compare the English with the Thai grammar	2.5
S6+S7 - to use content schema to access or find the reader's Ideas and to construct or formulate ideas	2.5
S6+S8 - to use content schema to access or find the reader's ideas and to summarise ideas	1.5
S8+S2 - to summarise ideas and to examine or think about the context of words or phrases or guess the meaning from context	1.5
S5+S2 - to use Thai formal schema to compare the English with the Thai grammar and to examine or think about the context of words or phrases or guess the meaning from context	0.7
S5+S3 - to use Thai formal schema to compare the English with the Thai grammar and to understand the meaning of the sentence or find a reason	0.7
S5+S7 - to use Thai formal schema to compare the English with the Thai grammar and to construct or formulate ideas	0.7
S7+S2 - to construct or formulate ideas and to examine or think about the context of words or phrases or guess the meaning from context	0.7
S6+S4 - to use content schema to access or find the reader's ideas and to confirm the reader understands about the sentence	0.7
Total	100.0

For the non-Thai context experiential text, it is apparent that the foremost single strategy for the better answers is the strategy of using Thai to examine or think about the context of words or phrases or guess the meaning from context. It appears in nearly two-fifths of the strategies for the better answers. The other major strategies which influence the better answers are those of using Thai to understand the meaning of the sentence or find a reason, to translate the word or phrase itself and to construct or formulate ideas. The other which features in the better answers is that of using formal schema to compare the English with the Thai grammar. A few of the better answers involve those of using Thai to confirm the reader understands about the sentence, to access or find the reader's ideas by using content schema and to summarise ideas. Moreover, some students use double or triple strategies to attain high scores. Multiple strategies which influence the better answers are the combination of using formal schema (S5) and other strategies that is S5+S2 (to use Thai formal schema to compare the English with the Thai grammar and to examine or think about the context of words or phrases or guess the meaning from context) and S5+S6 (to use Thai formal schema to compare the English with the Thai grammar and to use content schema to access or find the reader's ideas). The other prominent multiple strategies are the combination of the usage of Thai to summarise ideas (S8) and other strategies that is S8+S2 (to summarise ideas and to examine or think about the context of words or phrases or guess the meaning from context) and S8+S7 (to summarise ideas and to construct or formulate ideas). In addition, some students who do not need to use strategies are able to obtain a good result. The results are illustrated in Table 65.

Table 65 Strategies related to better answers, the non-Thai context experiential text

Single Strategy Use	Usage Percentage
S2 - to examine or think about the context of words or phrases or guess the meaning from context	38.0
S3 - to understand the meaning of the sentence or find a reason	14.0
S1 - to translate the word or phrase itself	7.6
S7 - to construct or formulate ideas	7.6
S5 - to use Thai formal schema to compare the English with the Thai grammar	4.4
S4 - to confirm the reader understands about the sentence	3.3
S6 - to use content schema to access or find the reader's ideas	2.1
S8 - to summarise ideas	1.0
S0 - no reference to strategy use	7.6
Multiple Strategy Use	
S5+S2 - to use Thai formal schema to compare the English with the Thai grammar and to examine or think about the context of words or phrases or guess the meaning from context	2.1
S5+S6 - to use Thai formal schema to compare the English with the Thai grammar and to use content schema to access or find the reader's ideas	2.1
S8+S2 - to summarise ideas and to examine or think about the context of words or phrases or guess the meaning from context	2.1
S8+S7 - to summarise ideas and to construct or formulate ideas	2.1
S8+S3 - to summarise ideas and to understand the meaning of the sentence or find a reason	1.0
S1+S2 - to translate the word or phrase itself and to examine or think about the context of words or phrases or guess the meaning from context	1.0
S7+S2 - to construct or formulate ideas and to examine or think about the context of words or phrases or guess the meaning from context	1.0
S7+S4 - to construct or formulate ideas and to confirm the reader understands about the sentence	1.0
S5+S3 - to use Thai formal schema to compare the English with the Thai grammar and to understand the meaning of the sentence or find a reason	1.0
S5+S3+S8 - to use Thai formal schema to compare the English with the Thai grammar, to understand the meaning of the sentence or find a reason and to summarise ideas	1.0
Total	100.0

Tables 64 and 65 indicate the fact that the foremost strategy, which has an effect on attaining high scores in both experiential texts, is that of using Thai to examine or think about the context of words or phrases or guess the meaning from context. The other major strategies for the better answers for both texts are those of using Thai to understand the meaning of the sentence or find a reason, to translate the word or phrase itself and to construct or formulate ideas and the use of Thai formal schema to compare the English with the Thai grammar. Other important ones for the Thai context text are those of using Thai to construct or formulate ideas, to confirm the reader understands about the sentence and the use of content schema to access or find the reader's ideas. The strategies of using Thai formal schema and content schema have slightly greater effects for the Thai context text than for the non-Thai one. Multiple strategies are valuable for students when they are not satisfied with using only one strategy to find the correct answers. Most of the important multiple strategies for the Thai context text are the combination of using Thai content schema and other strategies and the combination of using Thai to summarise ideas and other strategies. For the non-Thai context text, the important multiple strategies are the combination of using formal schema and other strategies and the combination of using Thai to summarise ideas and other strategies. Additionally, the avoidance of using strategies is more associated with better answers on the Thai context text than the non-Thai one. However, when the frequency of using these strategies in Tables 56 (see page 167) and 58 (see page 169) is compared, it is apparent that the number of better answers from using these strategies is still low. These results suggest that strategy use gives no guarantee of good answers.

6.4.3 Strategies and question types

From the task and the interviews, it appears that strategies are used differently based on question type categories i.e. bottom-up or top-down. Top-down questions comprise global and cohesive questions whereas bottom-up questions comprise literal and figurative questions. The next aspect reports on the relationship between the strategies and question types.

For the Thai experiential text, the major strategies for top-down questions are the use of Thai to examine or think about the context of word or phrase or guess the meaning from context, to understand the meaning of the sentence or find a reason and the use of content schema to access or find the reader's ideas. The fourth frequent strategy is the use of Thai formal schema to compare the English and the Thai grammar. Besides, some cases use the strategies to construct or formulate ideas and to summarise ideas to assist their top-down questions. On the other hand, a minor strategy is the use of Thai to confirm the reader understands about the sentence. Additionally, there are some responses for non-use of Thai in top-down questions. The results are displayed in Table 66.

Table 66 Strategies used in top-down questions, the Thai context experiential text

<u>Strategies</u>	<u>Frequency</u>	<u>Percentage</u>
S2 Examine	20	19.6
S3 Understand	19	18.6
S6 Content schema	17	16.7
S5 Formal schema	12	11.8
S7 Construct Ideas	9	8.8
S8 Summarise Ideas	9	8.8
S4 Confirm	5	4.9
S0 No use of Thai	11	10.8
Total	102	100.0

For the bottom-up questions of the Thai context text, Thai narrative, the major strategies are also the use of Thai to examine or think about the context of word or phrase or guess the meaning from context and to understand the meaning of the sentence or find a reason. The next frequent strategies are the use of Thai to translate the word or phrase itself, the use of Thai content schema to access or find the reader's ideas and the use of Thai formal schema to compare the English and the Thai grammar, respectively. Minor strategies are the use of Thai to confirm the reader understands about the sentence, to construct or formulate ideas and to, summarise ideas. Moreover, some students fail to report the use of Thai for any strategy. The results are displayed in Table 67.

Table 67 Strategies used in bottom-up questions, the Thai context experiential text

<u>Strategies</u>	<u>Frequency</u>	<u>Percentage</u>
S2 Examine	57	41.9
S3 Understand	22	16.2
S1 Translate	16	11.8
S6 Content schema	14	10.3
S5 Formal schema	11	8.1
S7 Construct Ideas	3	2.2
S8 Summarise Ideas	3	2.2
S4 Confirm	2	1.5
S0 No use of Thai	8	5.9
Total	136	100.0

Similarly, the strategy of examining or thinking about the context of a word or phrase or guessing the meaning from context is the topmost strategy for top-down questions, the non-Thai context text. The use of Thai to understand the meaning of the sentence or find a reason is another major strategy as well. Other frequent strategies are the use of Thai formal schema to compare the English with the Thai grammar and the use of Thai to construct or formulate ideas. Some cases reports on using the strategies to summarise ideas and to confirm the reader understands about the sentence. On the opposite end of the scale, those of using Thai to translate the word or phrase itself and to access the reader's ideas by using content schema are minor strategies for top-down questions. In addition, there are some responses indicating the non-use of any strategy. The results are shown in Table 68.

Table 68 Strategies used in top-down questions, the non-Thai context experiential text

<u>Strategies</u>	<u>Frequency</u>	<u>Percentage</u>
S2 Examine	37	31.6
S3 Understand	17	14.5
S5 Formal schema	16	13.7
S7 Construct	15	12.8
S8 Summarise	9	7.7
S4 Confirm	6	5.1
S6 Content Schema	4	3.4
S1 Translate	1	.9
S0 No use of Thai	12	10.3
Total	117	100.0

Again, the strategy of using Thai to examine or think about the context of word or phrase or guess the meaning from context is the foremost strategy for bottom-up questions in the non-Thai context experiential text. Other major strategies are the use of Thai to understand the meaning of the sentence or find a reason and to translate the word or phrase itself. Some cases report on using Thai to construct or formulate ideas and the use of formal schema to compare the English with the Thai grammar. On the other hand, the use of content schema to access the reader's ideas and the use of Thai to summarise ideas are minor strategies for bottom-up questions. Besides, a few responses avoid mentioning strategies. The results are displayed in Table 69.

Table 69 Strategies used in bottom-up questions, the non-Thai context experiential text

Strategies	Frequency	Percentage
S2 Examine	61	51.3
S1 Translate	13	10.9
S3 Understand	13	10.9
S7 Construct Ideas	11	9.2
S5 Formal schema	8	6.7
S8 Summarise Ideas	5	4.2
S6 Content Schema	4	3.4
S0 No use of Thai	4	3.4
Total	119	100.0

From Tables 66, 67, 68 and 69, the combined results point to the fact that the strategy of using Thai to examine or think about the context of word or context or guess the meaning from context is the foremost strategy for experiential texts for both top-down and bottom-up questions. Likewise, the strategy of using Thai to understand the meaning of the sentence or find a reason is one of the major strategies for both question types and both texts. The strategy of using Thai content schema is more prominent than that of using Thai formal schema for both top-down and bottom-up questions for the Thai context text than the non-Thai one. On the other hand, the strategy of using Thai formal schema is more important than that of using content schema for both top-down and bottom-up questions for the non-Thai context text than the Thai one. When the strategy of using Thai to translate the word or phrase itself is examined, it appears that this strategy is more essential for bottom-up questions for both texts. Conversely, the strategy of using Thai to summarise ideas is more important for only top-down questions for both

texts but it is a minor strategy for bottom-up questions for both texts. Moreover, the strategy of using Thai to construct or formulate ideas is an important one for both top-down and bottom-up questions for only the non-Thai context text whereas it is a minor strategy for the Thai context text. In addition, non-Thai usage is found more often for top-down questions than bottom-up questions in both texts. This accounts for around ten percent for top-down questions in both texts but only six percent for bottom-up questions in the Thai context text and around three percent in the non-Thai one.

In addition, the frequency of the strategic use for top-down questions of the Thai narrative experiential text is 1.13 times per question and 1.06 times per question for bottom-up questions. For the non-Thai context texts, it appears that the students use Thai to assist their answers 1.05 times per question for top-down questions and 1.15 times per question for bottom-up ones. This means that the students tend to use more than one strategy to answer each question for both question types of both texts.

6.5 Problems and question types

From reading comprehension task 3, experiential texts, it appears that the students encountered many problems in trying to comprehend these texts. In this part, the problems from the completed task as well as the problems related to student groups based on their English competency are presented.

6.5.1 Problems

From the task, it is apparent that the students experience many problems when reading both types of experiential text. The problems found from reading experiential texts and described in the interview are categorised into four categories as follows:

General problems

P1 cannot understand the word(s) in the question or cannot find the answer

P2 can find the answer but cannot explain in his/her own words or exact quote

P3 can answer only part of the question

P4 uses content schema instead of reading

Grammar problems

P5 parts of speech

P6 recognising English word order i.e. adjective + noun

P7 problems with breaking up words into prefix / root

P8 problems with singular / plural

P9 problems with pronouns and possessive pronouns

P10 grammar problems with double, participial adjective

P11 problems with tenses

P12 grammar problems about subject / verb agreement

P13 passive voice

P14 problems with verbs after preposition; participle / gerund

Problems with punctuation

P15 problems with apostrophe

P16 problems with phrase in apposition and relative clause between two commas (*not found in experiential texts*)

P17 punctuation; commas, semicolon

Problems with linkage

P18 conjunction

P19 problems with reference words; (personal, relative, possessive) pronouns

In the case of reading comprehension on experiential texts, the students sometimes encounter more than one problem for the same question. Hence, the crosstabulation by means of SPSS program is used to analyse for the problems found while reading experiential texts. The results are based on the numbers of responses for each problem as demonstrated in Tables 70 and 71.

For the Thai context experiential text, Thai narrative, fourteen problems are found as barriers for comprehending the text. The first and second most common problems for this text are general problems that the students answer only part of the question and that they cannot understand the word(s) in the question or cannot find the answer. Each of these problems accounts for about one-fifth of the number of all responses. Another major problem is a grammar problem with tenses. The problem with resorting to an exact quote is fairly frequently found in this text. On the other hand, minor problems mentioned are those with the use of content schema instead of reading, parts of speech, singular/plural, pronouns, subject/verb agreement, participle/gerund, word order, punctuation, apostrophe "s", and reference words. However, around one-third of the respondents mention no problems. The results are displayed in Table 70.

Table 70 Problems with the Thai context experiential text

<u>Problems</u>	<u>Frequency</u>	<u>Percentage</u>
<u>General Problems</u>		
P3 Answer only part	48	22.2
P1 Can't understand word(s)	46	21.2
P2 Exact quote	9	4.2
P4 Use content schema	2	1.0
<u>Grammar Problems</u>		
P11 Tenses	18	8.3
P5 Parts of speech	4	1.9
P8 Singular / plural	4	1.9
P9 Pronouns	3	1.3
P12 Subject / verb agreement	3	1.3
P14 Participle / gerund	2	1.0
P6 Word order	1	0.4
<u>Problems with Punctuation</u>		
P17 Punctuation, commas, semicolon	3	1.3
P15 Apostrophe "s"	1	0.4
<u>Problems with linkage</u>		
P19 Reference	3	1.3
P0 No problem	70	32.3
Total	217	100.0

For the non-Thai experiential Text, American narrative, fifteen problems are found as problems for comprehending the text. The first and second frequent problems for the non-Thai context text are general problems that the students cannot understand the word(s) in the question or cannot find the answer and that the students answer only part of the question. These account for nearly one-third of the number of all responses for

the former problem and slightly higher than one-fifth for the latter one. Another major problem is with reference words, which signal problems with linkage. Problems with the resort to an exact quote, tenses and prefix/suffix are fairly frequent mentioned. On the opposite end of the scale, minor problems for this text are those with the use of content schema instead of reading, pronouns, singular/plural, parts of speech, double/participial adjectives, subject/verb agreement, passive voice, punctuation, and conjunction. With this text, around one-fifth of the respondents mentioned having no problems. The results are illustrated in Table 71.

Table 71 Problems with the Non-Thai context experiential text

<u>Problems</u>	<u>Frequency</u>	<u>Percentage</u>
<u>General Problems</u>		
P1 Can't understand word(s)	70	31.4
P3 Answer only part	49	21.9
P2 Exact quote	5	2.3
P4 Use content schema	1	0.4
<u>Problems with Linkage</u>		
P19 Reference	28	12.6
P18 Conjunction	1	0.4
<u>Grammar Problems</u>		
P11 Tenses	6	2.7
P7 Prefix / suffix	5	2.3
P9 Pronouns	4	1.7
P8 Singular / plural	3	1.3
P5 Parts of speech	1	0.4
P10 Double / participial adjective	1	0.4
P12 Subject / verb agreement	1	0.4
P13 Passive voice	1	0.4
<u>Problems with Punctuation</u>		
P17 Punctuation	3	1.3
P0 No problem	45	20.1
Total	224	100.0

The next tables show the relationship between the problems with the students in each group, low, medium and high, according to their scores. The crosstabulation for multiple responses by means of the SPSS program is used to analyse the relationship between those ones. For the Thai context text, Thai narrative, it appears that all groups of the students have the same major problems, the problems that they can answer only part of the questions and that they cannot understand the word(s) in the question or cannot find the answer. Of these problems, the students in the low and the medium groups tend

to have more problems than the students in the high group. However, the students in the high group mention problems with tenses and resort to an exact quote more than those in the low and the medium groups. On the other hand, the minor problems for the high group are those with parts of speech, singular/plural, punctuation and reference words whereas those of parts of speech, pronouns, subject/verb agreement, and reference words are minor problems for the low group. The minor problems for the medium group are those of parts of speech, pronouns, subject/verb agreement, singular/plural, punctuation, word order, participle/gerund, apostrophe "s" and using content schema instead of reading. Additionally, the percentage of not having problems for the high group is the highest one and the low group gains the lowest one. The results are shown in Table 72.

Table 72 Problems for each group of students, the Thai context experiential text

Problems	<u>Score Groups</u>			
	Low	Medium	High	<u>Total</u>
General Problems				
P3 Answer only part	7.0	9.2	6.0	22.2
P1 Cannot understand	7.9	8.3	5.0	21.2
P2 Exact quote	.9	.9	2.4	4.2
P4 Use content schema	.0	1.0	.0	1.0
Grammar Problems				
P11 Tenses	1.9	1.4	5.0	8.3
P5 Parts of speech	.5	.9	.5	1.9
P8 Singular / plural	.0	1.0	.9	1.9
P9 Pronouns	.8	.5	.0	1.3
P12 Subject / verb agreement	.8	.5	.0	1.3
P14 Participle / gerund	.0	1.0	.0	1.0
P6 Word order	.0	.4	.0	.4
Problems with Punctuation				
P17 Punctuation	.0	.5	.8	1.3
P15 Apostrophe "s"	.0	.4	.0	.4
<u>Problems with Linkage</u>				
P19 Reference	.8	.0	.5	1.3
P0 No problem	7.8	11.5	13.0	32.3
Total	28.4	37.5	34.1	100.0

For the non-Thai context text, the major problems for the students in all groups, low, medium and high are those of the students cannot understand the word(s) in the question or cannot find the answer and the students answer only part of the question. The students in the low group tend to have slightly more problems with the former area than the students in the other groups whereas the latter problem is mentioned more often by

the students in the medium group followed by the high group. The other major problem is that with reference words which is reported slightly more often by the low group but is almost equally experienced by all groups. Likewise, the students in all groups have some problems with resorting to an exact quote, prefix/suffix and singular/plural. The minor problems for the low group are those with pronouns and conjunction whereas those with double/participial adjective, tenses, subject/verb agreement, punctuation and using content schema instead of reading are the minor ones for the students in the medium group. For the high group, minor problems are those with pronouns, tenses, parts of speech and passive voice. In addition, the students in the high group attain the highest percentage for having no problems whereas those in the low group gain the lowest one. The results are presented in Table 73.

Table 73 Problems for each group of students, the non-Thai context experiential text

Problems	<u>Score Groups</u>			Total
	Low	Medium	High	
General Problems				
P1 Can't understand	11.6	9.9	9.9	31.4
P3 Answer only part	5.4	8.5	8.0	21.9
P2 Exact quote	.9	.5	.9	2.3
P4 Use content schema	.0	.4	.0	.4
<u>Problems with Linkage</u>				
P19 Reference	4.6	4.0	4.0	12.6
P18 Conjunction	.4	.0	.0	0.4
Grammar Problems				
P11 Tenses	.0	1.8	.9	2.7
P7 Prefix / suffix	1.0	.4	.9	2.3
P9 Pronouns	.9	.0	.8	1.7
P8 Singular / plural	.5	.4	.4	1.3
P5 Parts of speech	.0	.0	.4	.4
P10 Double adjective	.0	.4	.0	.4
P12 Subject/verb agreement	.0	.4	.0	.4
P13 Passive voice	.0	.0	.4	.4
<u>Problems with Punctuation</u>				
P17 Punctuation	.0	1.3	.0	1.3
P0 No Problem	4.4	7.2	8.5	<u>20.1</u>
Total	29.7	35.2	35.1	100.0

The results from Tables 70, 71, 72 and 73 indicate that the students in all groups have several problems which hinder their understanding of experiential texts. The major problems for both texts, the Thai and the non-Thai ones, are general problems that the students cannot understand the word(s) in the question or cannot find the answer and that they can answer only part of the question. Likewise, these problems are also the major problems for students in all groups. The problem with reference words is fairly frequently mentioned for the non-Thai context text but it is rarely found for the Thai one. Besides, the students have much higher percentage for not admitting to problems for the Thai context text than the non-Thai one. In addition, the students in the high group reveal the highest percentage of this contrasted with the lowest for the low group.

When comparing the problems from both texts for the high group, it appears that the students experienced the same major problems in both texts i.e. problems that the students cannot understand the word(s) in the question or cannot find the answer and that they can answer only part of the question but the percentages for these problems are higher for the non-Thai context text than for the Thai one. Other important problems for the students in this group for the Thai context text are that with tenses whilst that with reference words is the other for the non-Thai context text. For the medium group, problems are that the students cannot understand the word(s) in the question or cannot find the answer and that they can answer only part of the question. These are mentioned at a similar frequency for both texts. Likewise, for the low group, the students mentioned the same leading problems as the medium group. In addition, the students encounter the former problem more often for the non-Thai text whereas the latter is mentioned more often for the Thai one.

6.5.2 Problems and question types

In this study, the problems vary with question types of the texts, top-down and bottom-up. Accordingly, this section, concerned with the relationship between problems and question types, distinguishes the two question types, top-down and bottom-up.

6.5.2.1 Top-down problems

For the Thai context experiential text, Thai narrative, the results show that the main top-down problem is with answering only part of the question. This accounts for nearly half of all mentioned problems. Problems with resorting to an exact quote and singular/plural are found infrequently. For minor problems, only a few examples of problems with not understanding the word(s) in the question or not finding the answer, pronouns, tenses, punctuation, and reference words are found. Additionally, around one-third of the respondents mentioned having no problems for top-down questions. The results are shown in Table 74.

Table 74 Top-down problems, the Thai context experiential text

<u>Problems</u>	<u>Frequency</u>	<u>Percentage</u>
<u>General Problems</u>		
P3 Answer only part	40	44.4
P2 Exact quote	6	6.7
P1 Can't understand word(s)	1	1.1
<u>Grammar Problems</u>		
P8 Singular / plural	4	4.4
P9 Pronouns, possessive pronouns	3	3.3
P11 Tense	1	1.1
<u>Problems with Linkage</u>		
P19 Reference	3	3.3
<u>Problems with Punctuation</u>		
P17 Punctuation	2	2.2
P0 No problem	30	33.3
Total	90	100.0

For the non-Thai experiential text, the foremost top-down problem is a problem with linkage that is reference words. This accounts for around one-fourth of all responses. The other major problems are general problems with answering only part of the question and with not understanding the word(s) in the question or not finding the answer. The problem with using exact quotes is occasionally found. On the other hand, minor problems for this text are those with using content schema instead of reading, singular/plural, tenses, pronouns, passive voice, and punctuation. In addition, around thirty percent of the respondents mention having no problems. The results are displayed in Table 75.

Table 75 Top-down problems, the non-Thai context experiential text

<u>Problems</u>	<u>Frequency</u>	<u>Percentage</u>
<u>Problems with Linkage</u>		
P19 Reference	28	25.9
<u>General Problems</u>		
P3 Answer only part	19	17.6
P1 Can't understand word(s)	13	12.0
P2 Exact quote	5	4.6
P4 Use content schema	1	.9
<u>Grammar Problems</u>		
P8 Singular / plural	3	2.8
P11 Tenses	3	2.8
P9 Pronouns, possessive pronouns	1	.9
P13 Passive voice	1	.9
<u>Problems with Punctuation</u>		
P17 Punctuation	2	1.9
P0 No problem	32	29.6
Total	108	100.0

When compared, the results from Tables 74 and 75 point to the fact that the foremost top-down problem for the Thai context text is a general problem with answering only part of the question whereas this problem is slightly less important for the non-Thai context text. The foremost problem for the non-Thai context text is a problem with linkage i.e. reference words but this problem is a minor one for the Thai context text. Likewise, the problem with not understanding the word(s) in the question or not finding the answer is the other essential problem for the non-Thai context text whereas it is a minor one for the Thai context text. The problem with resorting to an exact quote is occasionally found in both texts. The other minor problems found in both texts are those with singular/plural, pronouns, tenses and punctuation whereas those with passive voice

and using content schema instead of reading are found for only the non-Thai text. Additionally, a similar number of the respondents mention having no problems for top-down skills for both texts.

6.5.2.2 Bottom-up problems

Students also show their weak points in relation to bottom-up skills with reading experiential texts. For the Thai context text, Thai narrative, the foremost problem is a general problem with not understanding the word(s) in the question or not finding the answer. This accounts for around one-third of the number of all responses. The other major problem is a grammar problem with tenses. Some students mention the problem of answering only part of the question and using parts of speech. On the other hand, minor problems are those with the resort to an exact quote, the use of content schema instead of reading, subject/verb agreement, participle/gerund, word order, apostrophe "s" and punctuation. In addition, around thirty-one percent of the respondents mention having no problems. The results are illustrated in Table 76.

Table 76 Bottom-up problems, the Thai context experiential text

<u>Problems</u>	<u>Frequency</u>	<u>percentage</u>
General Problems		
P1 Cannot understand word(s)	45	35.5
P3 Answer only part	8	6.3
P2 Exact quote	3	2.4
P4 Use content schema	2	1.6
Grammar Problems		
P11 Tenses	17	13.4
P5 Parts of speech	4	3.2
P12 Subject / verb agreement	3	2.4
P14 Participle / gerund	2	1.6
P6 Word order	1	.7
Problems with Punctuation		
P15 Apostrophe "s"	1	.7
P17 Punctuation	1	.7
P0 No problem	40	31.5
Total	127	100.0

For the non-Thai context text, the American narrative, the foremost problem for bottom-up question is with not understanding the word(s) in the question or not finding the answer. This appears around half of the number of all responses. The other major one is with resorting to an exact quote. This accounts for one-fourth of the number of all responses. Problems with prefix/suffix are also found for this text. Minor problems are with pronouns, tenses, parts of speech, double or participial adjective, subject/verb agreement, punctuation and conjunction. In addition, around eleven percent of the respondents mention no problems. The results are displayed in Table 77.

Table 77 Bottom-up problems, the non-Thai context experiential text

<u>Problems</u>	<u>Frequency</u>	<u>Percentage</u>
<u>General Problems</u>		
P1 Cannot understand word(s)	57	49.1
P3 Answer only part	30	25.9
<u>Grammar problems</u>		
P7 Prefix / suffix	5	4.3
P9 Pronouns, possessive pronouns	3	2.6
P11 Tenses	3	2.6
P5 Parts of speech	1	.9
P10 Double / participial adjective	1	.9
P12 Subject / verb agreement	1	.9
<u>Problems with Punctuation</u>		
P17 Punctuation	1	.9
<u>Problems with Linkage</u>		
P18 Conjunction	1	.9
P0 No problem	13	11.2
Total	116	100.0

The results from Tables 76 and 77 point to the fact that the students show weaknesses with general problems where they cannot understand word(s) in the question or cannot find the answer for bottom-up skills for both texts. The problem with tenses is a crucial problem for the Thai context text whereas it is a minor one for the non-Thai text. The problem with answering only part of the question is a major problem for the non-Thai context text whilst it is a problem which fairly frequently found for the Thai one. Besides, a problem with prefix/suffix is fairly frequently mentioned for the non-Thai one. Other minor problems for both texts are those with parts of speech, subject/verb agreement and punctuation. The others for only the Thai one are with resorting to an exact quote, using content schema instead of reading, word order, verbs after preposition or participle/gerund and apostrophe "s". Furthermore, other minor problems which are

found for only the non-Thai context text are those with prefix/suffix, pronouns, double or participial adjective and conjunction. Additionally, the students have fewer bottom-up problems for the Thai context text than for the non-Thai one.

6.6 Summary

This chapter presents the analysis of the relationship between the preference of text types and scores, text types and scores, strategies and question types, strategies and scores and question types and problems from reading experiential texts.

Ninety percent of the students prefer the Thai context text whereas the other ten percent has a preference for the non-Thai one. The mean scores of the Thai context text are higher than the non-Thai one for both groups for preference of text type. The preference of text has a positive effect on the scores of the Thai context text but the scores for the non-Thai context text in relation to the text preference are not related in this positive way. Therefore, we can conclude in this chapter that a culturally familiar text, the Thai one, has more influence on student comprehension than preference of text type. When a mixed factorial ANOVA was used to analyse the differences between the scores and preferences for experiential texts, the effect of text type was highly significant ($p < .05$), the main effect of preference was not significant ($p > .05$), and no interaction was found between preference and text type ($p > .05$). This means that the overall task mean scores for the Thai context text regardless of text preference are higher than those for the non-Thai one.

When crosstabulation of the scores themselves is made, because the scores in all aspects, task scores, question scores and sentence scores for both texts are lower than fifty percent, the overall scores for experiential texts are lower than fifty percent as well. Furthermore, a paired sample T-test was used to analyse the differences between the scores of the Thai and the non-Thai context texts for experiential texts. The results show that there were statistically significant differences ($p < .05$) between two texts for all aspects, total task scores, question scores and sentence scores.

For the question types, the scores of Thai usage for cohesive questions are the highest ones whereas the scores of figurative questions are the lowest ones. Although the scores of literal and global questions are higher than those of figurative ones, they are still lower than fifty percent. Moreover, the scores of cohesive and literal questions for

the Thai context text are higher than fifty percent but those for the non-Thai one are still lower than fifty percent, especially those of literal ones. The students have major problems with literal questions for the non-Thai context text and the scores of figurative and global questions in both texts are very low as well. Additionally, the means for bottom-up skills are lower than those of top-down skills in experiential texts.

Related to the role the Thai language plays in reading experiential texts, seventy percent of the students use Thai as a strategy to facilitate their understanding for both experiential texts whereas the others report using both Thai and English to assist their comprehension. For the frequency use of Thai to assist the student comprehension, it is apparent that the students rely equally on the strategic use of Thai for both texts. Moreover, they tend to use Thai more often for bottom-up questions for both texts.

In their use of Thai, students use the same foremost strategy for both texts, the use of Thai to examine or think about the context of words or phrases or guess the meaning from context and the other major one is to understand the meaning of the sentence or find a reason. These major strategies also have an effect on producing better answers. Besides, the strategies of using Thai to construct or formulate ideas and the use of Thai formal schema are the next most important major strategies for the non-Thai context text, whereas that of using content schema fulfils the same role for the Thai context text. Similarly, the students at all three levels use the same foremost strategy, the usage of Thai to examine or think about the context of word or phrase or to guess the meaning from context, for both texts. Students in the high group report using the strategy of formal schema for the non-Thai text more often than the other groups, whereas the strategy of using content schema are prominent for the students in the high and medium groups for the Thai context text. Besides, those of multiple strategies are very useful when students are not satisfied with using a single strategy to find a correct answer. The major useful patterns for multiple strategies are the combination of content schema and the others and the combination of using summarise ideas and the others for the Thai context text. For the non-Thai context text, the significant multiple strategies are the combination of formal schema and the others and the combination of using summarise ideas and the others. In addition, the avoidance of using Thai appears for both texts but it is slightly higher for the Thai one.

In relation to the problems experienced when reading experiential texts, there are several general problems, grammar problems, problems with punctuation and problems with linkage. The major problems for both texts are general problems that the students cannot understand the word(s) in the question or cannot find the answer and that students can answer only part of the question. Another important problem for the Thai context text is a grammar problem with using tenses, whereas a problem with linkage, using reference words, is for the non-Thai one. General problems with not understanding the word(s) in the question or cannot find the answer and with answering only part of the question are also major problems for students at all levels. Moreover, the students in this case reveal a much higher percentage for not admitting to problems for the Thai context text than the non-Thai one.

The foremost top-down problem for the Thai context text is that with answering only part of the question whereas this problem is one of major problems for the non-Thai context text. The foremost problem for the non-Thai context text is that with reference words but this problem is a minor one for the Thai context text. Similarly, the problem with not understanding the word(s) in the question or not finding the answer is the other major problem for the non-Thai context text whereas it is a minor one for the Thai context text.

The results in this chapter point to the fact that the students have low outcomes in relation to both top-down and bottom-up skills for experiential texts although they use a range of strategies to assist their comprehension.

The next chapter will report on the analysis of reading problems the students experienced with reading sentences, selected from each text.

CHAPTER SEVEN

ANALYSIS OF SENTENCE PROBLEMS

Chapter seven reports on the data analysis of reading problems experienced with six sentences selected from the transactional, editorial and experiential texts. The problems are categorised in relation to bottom-up and top-down problems, where 'bottom-up' refers to sentence parts and 'top-down' to the meaning of the entire sentence.

7.1 Reading problems with transactional texts

In this section, problems from reading comprehension on transactional or information-based texts, concerned with cities and taken from the New Encyclopedia Britannica are presented.

Twenty students engaged in retrospective interviews soon after completing a reading comprehension task which consisted of questions about two texts, Bangkok and Wellington. After students answered questions on the whole text they were required to explain the meaning of two sentences, one from each of the two transactional texts as follows.

Sentence from the Thai context text, Bangkok:

The city's economy is centred on its port, which handles nearly all of the country's exports and imports, and on its commerce and industry.

Sentence from the non-Thai context text, Wellington:

The site chosen, at the mouth of the Hutt River, proved unsuitable, and a move was made to Lambton Harbour on the west shore.

The two kinds of problems that were mentioned by the students are those dealing with sentence parts as well as the overall meaning of the sentence.

7.1.1 Sentence parts

From the reading comprehension task and the interviews, it is apparent that students have major problems with vocabulary, verbs and punctuation.

7.1.1.1. Vocabulary

The students have problems with word meanings. Even if they know the meaning of a word, they do not understand what the word meant when it appears in the sentence. Sometimes also they know a word but the part of speech has changed in the sentence studied.

Bangkok Text: They do not know that some words can be both a verb and a noun such as “handle” which is known as a noun but it becomes a verb in the text.

Wellington Text: Similarly “move” which is known as a verb becomes a noun, signalled by the preceding article “a”.

7.1.1.2. Verbs

The form of verbs in academic writing is a major problem for comprehending meaning as well.

- **Passive voice:** Passive finite / main verbs presents the greatest difficulty about the form of verbs because Thai students are not accustomed to passive voice.

Bangkok Text: The passive “is centred” was the main finite verb in the sentence.

Wellington Text: The passive “was made” was the main finite verb in the second main clause.

When students cannot locate the main verb, it is very unlikely that they will understand the main idea.

- **-ed form of verbs:** The students are confused about “-ed” form of verbs whether it is past tense or past participle. The irregular past participle “chosen” after the noun “site” presents a difficulty.

Wellington Text: The verb “chosen” is not the main verb but a passive participle whereas “proved” is the main verb which is past tense active voice.

7.1.1.3. Punctuation

Punctuation, which is used to mark the possessive, a phrase in apposition and a relative clause also causes a great deal of uncertainty.

- **Apostrophe “s”:** The students are confused about the difference between the two meanings of the apostrophe “s”. One use shows possession and the other could be a short form of the verb to be such as it’s = it is.

Bangkok Text: In the phrases, “city’s economy” and “country’s exports and imports”, the apostrophe “s” indicates possession or ownership. They are not as the students think examples of the verb to be as “it’s”, “she’s”, “he’s” or “there’s”.

- **Phrase in apposition with two commas:** The use of commas to indicate a phrase in apposition causes uncertainty for the students when reading.

Wellington Text: They do not understand that “at the mouth of the Hutt River,” is used as a phrase in apposition to explain the preceding phrase “the site chosen”.

- **Relative clause:** The relative clause is also a problem for sentence parts because it is marked off by two commas.

Bangkok Text: The relative clause “which handles nearly all of the country’s export and imports” is used to explain the preceding noun “port”.

7.1.2 Overall meaning of the sentence

Sentence parts are not the only problem area. There are also more general problems in relation to the meaning of the whole sentence. The ability to link ideas while reading is an important area where these Thai students show some weaknesses. In this case this involves such things as reference and complex sentences.

7.1.2.1 Linking ideas

- **Reference:** Pronoun reference prevents the students from comprehending the overall meaning of the sentence.

Bangkok Text: Some students do not know which words the relative pronoun, “which” and the possessive pronoun, “its” refers to.

• **Complex sentence:** Complex sentences with coordinating conjunctions, ellipsis and nominalisation are also an obstacle to understanding the meaning of the sentences.

- **Conjunctions:** The use of several examples of the conjunction “and” within the first sentence creates difficulty in finding the main idea.

Bangkok Text: There are three “ands” in the sentence so the students are confused about which one is the coordinating joining on a main idea. What is necessary to see that the first and third “and” merely link two nouns “exports + imports” and “commerce + industry” and do not link main ideas. Whereas the second “and” is the true example of sentence coordination.

Wellington Text: The conjunction “and” in the second sentence is also a coordinating conjunction which join main ideas.

- **Ellipsis:** Examples of ellipsis, where words are omitted but meanings are carried on from earlier parts of the text, also prevent the students from grasping the meaning.

Bangkok Text: “The city’s economy is centred on its port., and (the city’s economy is centred) on its commerce and industry.” The elliptical phrase is a barrier to student understanding of parallelism in the sentence.

Wellington Text: The word, “chosen”, a shortened form of the relative clause also causes uncertainty. As a result students fail to see that it was the passive past participle.

- **Sentence subject:** Nominalisation or a long noun phrase makes it difficult for the students to find the subject of the sentence.

Wellington Text: The nominalisation, “The site chosen, at the mouth of the Hutt River,” is a real barrier stopping the students from finding the subject of the sentence.

Reading problems on transactional texts are displayed in Table 78.

Table 78 Reading problems with transactional texts

Processes	Problems	Text 1: Bangkok	Text 2: Wellington
Sentence Parts	1. Vocabulary	<ul style="list-style-type: none"> ● word meanings ● parts of speech 	<ul style="list-style-type: none"> ● word meanings ● parts of speech
	2. Form of verbs	<ul style="list-style-type: none"> ● passive voice 	<ul style="list-style-type: none"> ● passive voice ● “-ed” form of verbs
	3. Punctuation	<ul style="list-style-type: none"> ● apostrophe “s” ● relative clause between two commas 	<ul style="list-style-type: none"> ● phrase in apposition with two commas
Overall Meaning of the Sentence	4. Linking Ideas	<ul style="list-style-type: none"> ● reference ● complex sentence <ul style="list-style-type: none"> - conjunctions - ellipsis 	<ul style="list-style-type: none"> ● reference ● complex sentence <ul style="list-style-type: none"> - conjunctions - ellipsis - nominalization

When the problems from both texts are compared, similar problems occur in both sentence parts and overall meaning of the sentence while reading. Sentence parts such as the vocabulary, the verbs and the punctuation are obstacles to the understanding of both sentences. Furthermore, methods used to link ideas such as reference, coordination, ellipsis and nominalisation are problematical.

This small part of the study shows that Thai students have problems with both sentence parts and overall meaning of the sentences in reading transactional or information-based texts. These problems may arise from inadequate English language competence of the students before interacting with the texts.

The next part reports on the analysis of reading problems on editorial texts.

7.2 Reading problems with editorial texts

In this section, problems associated with reading editorial texts, concerned with politics are discussed.

Sentence from the Thai context text, Thai politics:

Nothing, of course, can mend broken fences and restore relations like a high-level visit, especially when it involves a new leader who is anxious to build up his regional stature and show he is progressive and open-minded.

Sentence from the non-Thai context text, Iranian politics:

This impression could get stronger if Khatami makes use of the popular mandate of this election to push through his economic-reform package for job-creation.

Problems of two kinds were mentioned by the students.

7.2.1 Sentence parts

From the reading comprehension task and the interviews, it is noticeable that students have major problems with vocabulary, metaphors, word order, verb form, and punctuation.

7.2.1.1 Vocabulary

The students have problems with word meanings in the texts as well as parts of speech of the words. They are also unfamiliar with words used as metaphors.

• **Parts of speech:** The students are uncertain about the parts of speech of some words. This problem is a barrier to understanding the meanings.

Thai Politics: The students are unclear about the part of speech of the word “broken” which is a past participle used as an adjective. This word looks like a verb so it creates difficulty. The other word which presents a problem is the word “open-minded”. The students are uncertain about its part of speech because the word “open” is a verb but the word “open-minded” is a compound which is used as an adjective.

Iranian Politics: The students have a problem with the word “economic-reform” because the word “reform” itself is a verb but this compound word is used as an adjective. The word “use” is known as a verb but it is used as a noun in the text so it causes confusion to the students.

- **Word order:** The meaning of noun phrases in these texts is also a hindrance.

Thai Politics: The word order of a noun phrase in the English language is “adjective + noun” but in Thai is “noun + adjective”. Therefore, some students are confused about the meaning of the noun phrase “a high-level visit”.

Iranian Politics: Similarly, the hyphenated noun phrases “his economic-reform package” and “job-creation” in the text prevent comprehension of the students.

- **Metaphors:** Metaphors in the texts adds to the difficulties with vocabulary already mentioned.

Thai Politics: The use of metaphors in “mend broken fences” and “open-minded” compounds vocabulary problems.

Iranian Politics: Here the metaphor “package” used to mean “a set of laws” and not “something in a container” is not easily understood.

7.2.1.2. Verbs

The form of verbs is a major problem for understanding meaning of the sentences.

- **Modal:** The students are unclear about the meaning of the modal “c. uld + verb” in the text.

Iranian Politics: The modal “could + get” causes uncertainty about the tense and the meaning of the text. It is used to talk about a possible action in the present or in the future not in the past.

7.2.1.3. Punctuation: Commas used in the first text hinder understanding.

- **Extra information with two commas:** The extra information between two commas for emphasis is a drawback in the attempts to follow the meaning of the sentence.

Thai Politics: There are three commas in the text. The first and the second commas around “of course” are used to indicate the feelings of certainty of the writer about the main clause. The third comma is used to separate the main clauses and the subordinate clauses.

7.2.2 Overall meaning of the sentence

General problems in relation to the meaning of the whole sentence as well as the sentence parts exist. The students show their limitations in understanding methods used to link ideas in the sentences such as reference, conjunctions, ellipsis and in finding a subject of the sentence.

7.2.2.1 Linking ideas

- **Reference:** One example of reference in each sentence is a barrier to understanding.

Thai Politics: Some students do not know what the pronoun reference “it” refers to.

Iranian Politics: Likewise, the reference “this impression” in the second text is a hindrance to student understanding.

- **Complex sentence:** Complex sentences with several conjunctions and ellipsis are a drawback for the students.

- **Conjunctions:** The conjunction “and” in the first sentence causes difficulty.

Thai Politics: Three “ands” in the sentence presents difficulty to understanding the meaning. The students can not recognise that the first “and” is the coordinating conjunction linking the main idea. The second “and” is a coordinating conjunction joining the main ideas in the relative clause starting with “who”. On the other hand, the third “and” is used to join the two adjectives “progressive” and “open-mined”.

- **Ellipsis:** Two examples of ellipsis in the first sentence hinder comprehension.

Thai Politics: In a parallel structure, the second subject together with the modal is omitted as in “Nothing can mend broken fences and (nothing can) restore relations”. The other example of ellipsis omits the second infinitive of the relative clause as in “who is anxious to build up his regional stature and (to) show he is progressive and open-minded”.

- **Sentence subject:** Some students have no experience with the word “nothing” as the subject of a sentence.

Thai Politics: The students cannot find the subject of the sentence because they do not know that the word “nothing” can be the subject a sentence.

Reading problems with editorial texts are displayed in Table 79.

Table 79 Reading problems with editorial texts

Processes	Problems	Text 1: Thai Politics	Text 2: Iranian Politics
Sentence Parts	1. Vocabulary	<ul style="list-style-type: none"> • word meanings • parts of speech • word order • metaphor 	<ul style="list-style-type: none"> • word meanings • parts of speech • word order • metaphor
	2. Form of verbs	-	• modal
	3. Punctuation	• extra information between two commas	-
Overall Meaning of the Sentence	4. Linking Ideas	<ul style="list-style-type: none"> • reference • complex sentence <ul style="list-style-type: none"> - conjunctions - ellipsis - sentence subject 	<ul style="list-style-type: none"> • reference • complex sentence <ul style="list-style-type: none"> - ellipsis

When the problems from both texts about Thai and Iranian politics are compared, it is apparent that students have the same vocabulary problems concerning word meanings, parts of speech, word order and metaphors. Punctuation and the modal create barriers to student attempts to follow the two political texts. In addition, linkage of ideas

dealing with reference, and complex sentence structure with conjunctions and ellipsis are confronting to the students.

The next part reports on the analysis of reading problems with experiential texts.

7.3 Reading problems with experiential texts

In this section, problems from reading comprehension with experiential texts, taken from autobiographical books are presented.

Sentence from the Thai narrative:

Because we came to school too late when we had looked for the wild fruits too far out of the way and forgotten to notice the sunlight, and because we had fought with each other.

Sentence from the American narrative:

Some one took it and I was caught up and held close in the arms of her who had come to reveal all things to me, and, more than all things else, to love me.

Student responses about problems encountered are separated into two aspects, sentence parts and overall meaning of the sentence.

7.3.1 Sentence Parts

The students experienced confusion in three main parts, vocabulary, verbs and punctuation.

7.3.1.1. Vocabulary

Unfamiliar vocabulary is the main problem for Thai students while reading these two narratives. They do not know the meaning of some words so they cannot understand the sentences.

Thai Narrative: Some words that the students have not met before are “wild”, “notice”, and “fought”. These words cause difficulty in comprehending the text.

American Narrative: The words “caught up”, “held”, and “reveal” are a barrier to understanding.

7.3.1.2. Verbs

The form of verbs is one of the major problems which prevent student understanding of the meaning of the sentences.

- **Passive voice:** Passive finite / main verbs usually make students confused about the subject of a clause.

American Narrative: The passives “was caught up and (was) held” are the main finite forms in the second clause.

- **Tenses:** Difficulties from tenses impede student understanding of the sentences as well.

Thai Narrative: Some students do not notice that there are both past tense and past perfect tense verbs in the sentence. The verb, “came”, is past tense but the verbs, “had looked” and “(had) forgotten”, are past perfect tense which show the events happened before the event referred to by “came”. Likewise, the verb “had fought” also show past perfect tense but this is linked to the previous clause and does not appear in this sentence.

American Narrative: There are two different examples of the past tense in this sentence as well. The verbs, “took”, “was caught up” and “was held”, are past tense whereas the verb, “had come” is a past perfect tense.

7.3.1.3 Punctuation

Punctuation in the second sentence causes difficulty in comprehending the meaning of the text, especially in the sentence with several commas.

- **Extra information with two commas:** The extra information between two commas for emphasis is a special obstacle to comprehension of the second text.

American Narrative: There are three commas in the sentence. The first comma is used to separate clauses, but the second and the third commas are used to show the extra information “more than all things else” for emphasizing the importance of the following clause, “to love me”.

7.3.2 Overall meaning of the sentence

General problems in relation to the meaning of the whole sentence exist besides the problems with sentence parts. The linking of ideas is an important strategy for comprehending the meaning of the sentence. In this case, reference and complex sentences are major problems.

7.3.2.1 Linking ideas

- **Reference:** Several examples of pronoun reference and the relative pronoun in the second sentence cause difficulty in comprehending the overall meaning of the sentence.

American Narrative: Some students do not know who the referents are for the pronouns, “it”, “I”, “her” and “me” as well as the relative pronoun, “who”.

- **Complex sentence:** Complex sentences with coordinating conjunctions together with conjunctions for indicating reason, and ellipsis prevent students from understanding the meaning of the sentences.

- **Conjunctions:** The conjunctions “and” and “because” in the sentences makes it difficult for the students to find the main idea.

Thai Narrative: The conjunction “and” is the coordinating conjunction linking the main idea whereas the conjunction “because” is the conjunction introducing a subordinate clause of reason.

American Narrative: There are three “ands” in the sentence. The students cannot recognise that the first and the second “and” are coordinating conjunctions joining three main ideas. On the other hand, the third “and” just links two subordinate clauses starting with “who”.

- **Ellipsis:** The examples of ellipsis in both sentences impede student understanding.

Thai Narrative: In a parallel structure, the second subject together with the auxiliary verb of past perfect tense are omitted as in “we had looked for.....and (we had) forgotten to.....”

American Narrative: Two examples of ellipsis occur here, the second subject and the auxiliary verb of passive voice and past perfect tense as in “I was caught up and (I was) held.....” and “who had come to reveal.....and (who had come) to love me” are omitted.

Reading problems with experiential texts are displayed in Table 80.

Table 80 Reading problems with experiential texts

Processes	Problems	Text 1: Thai Narrative	Text 2: American Narrative
Sentence Parts	1. Vocabulary	• word meanings	• word meanings
	2. Form of verbs	- • tenses	• passive voice • tenses
	3. Punctuation	-	• extra information with two commas
Overall Meaning of the Sentence	4. Linking Ideas	- • complex sentence - conjunctions - ellipsis	• reference • complex sentence - conjunctions - ellipsis

When the problems from both texts are compared, the Thai narrative and the American narrative, it is apparent that for the most part similar problems in both sentence parts and overall meaning of the sentence exist. Sentence parts such as word meanings, passive voice, tenses and punctuation are obstacles to understanding meanings of the sentences. Moreover, linking ideas such as reference and complex sentence with conjunctions and ellipsis are challenging to the students.

7.4 Summary

This chapter reports on the analysis of reading problems with six sentences, one each from the transactional, editorial and experiential texts. The problems are categorised according to models of the reading process, bottom-up or sentence parts and top-down or overall meaning of the sentence.

The students have major problems for bottom-up skills with vocabulary, verbs and punctuation and for top-down skills with methods used to link ideas for all texts. For sentence part or bottom-up problems, the students show their weaknesses with word meaning for all texts and parts of speech for transactional and editorial texts. Problems with word order and metaphors are found in both editorial texts. Students report having problems with the form of verbs for almost all texts except the Thai editorial text. Passive voice is a major problem for both transactional texts and the non-Thai experiential text. Problems with tenses are found in both experiential texts and a modal presents a problem for the non-Thai editorial text.

The next chapter will report on the analysis of the questionnaire and the interview.

CHAPTER EIGHT

THE QUESTIONNAIRE

This research study has been designed to investigate the influence that the Thai language has on students while they are reading a variety of English texts as well as to improve understanding of what aspects of reading texts cause problems. It also aims to determine whether and to what extent students react differently to texts written about a Thai context compared with a non-Thai context, as well as to different genres.

In order to provide as full a picture of this as possible, a questionnaire promoting reflection on the reading tasks was used one week after completing the tasks and retrospective interviews. This was done in order to triangulate information on the cognitive processes from other sources. The students filled out both parts of the questionnaire (see appendix B, pages 322-323). The quantitative part is concerned with results from a student questionnaire in part A, whereas the qualitative part is concerned with insights gained from the interview in part B of the same questionnaire.

8.1 Student questionnaire (Part A)

This part of the questionnaire relates to the quantitative data collected from twenty students at Udon Thani Rajabhat University after completing all reading comprehension tasks and all retrospective interviews. There were seven items for this part of the questionnaire. The students had to check only one alternative for items 1, 2, 3, 5, and 6 as shown in Figures 23, 24, 25, 27 and 28 while for items 4 and 7 as shown in Figures 26 and 29, they could check all items that applied to them.

The results, calculated using percentages, are visually displayed in pie chart and bar graph forms accompanied by a brief explanation of the result. The three topics for which information is available from the questionnaire are the frequency of the use of Thai, the advantages of using Thai and student reading habits.

8.1.1 Frequency of Thai usage

Student views about the frequency of Thai usage for understanding reading texts are displayed in Figures 23 and 24.

8.1.1.1 The use of translation while reading English

From the questionnaire, all students report using Thai to translate the reading texts as shown in Figure 23.

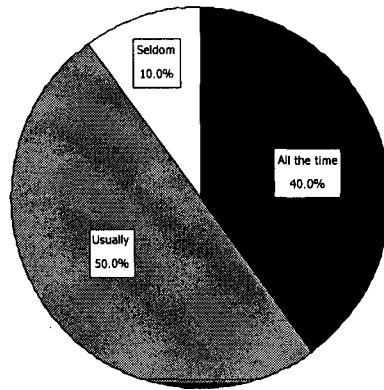


Figure 23 The use of translation while reading English

Figure 23 shows that half of the students usually use translation while reading English and 40% of them use translation all the time. Only a few of them seldom use it.

8.1.1.2 Thinking in Thai while reading

All students report thinking in Thai in addition to translating while reading as shown in Figure 24.

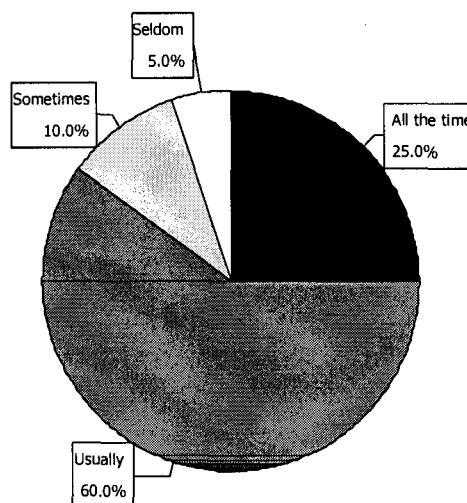


Figure 24 Thinking in Thai while reading

Figure 24 shows that thinking in Thai while reading is usually the practice of 60% of the students with an additional 25% thinking in Thai all the time. Only a few students think in Thai sometimes and even fewer seldom do it.

8.1.2 Advantages of using Thai

Students report the Thai language assists their comprehension of the English reading as shown in Figures 25, 26 and 27.

8.1.2.1 Thai language helps comprehension

The use of Thai facilitates comprehension of the English reading for students is shown in Figure 25.

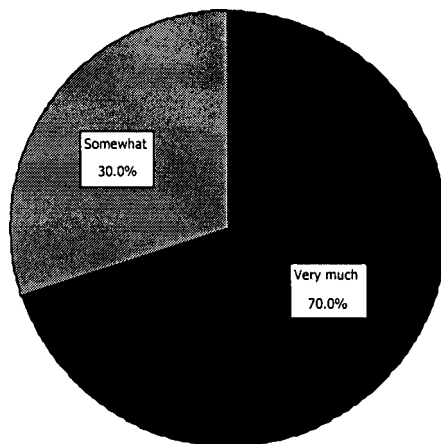


Figure 25 Degree of help from the use of Thai

Figure 25 shows that the majority of students at 70% think that the Thai language greatly helps their comprehension of English when reading while the remainder think that it helps them somewhat.

8.1.2.2 The advantages of translation

Students report the areas where translation is used as shown in Figure 26.

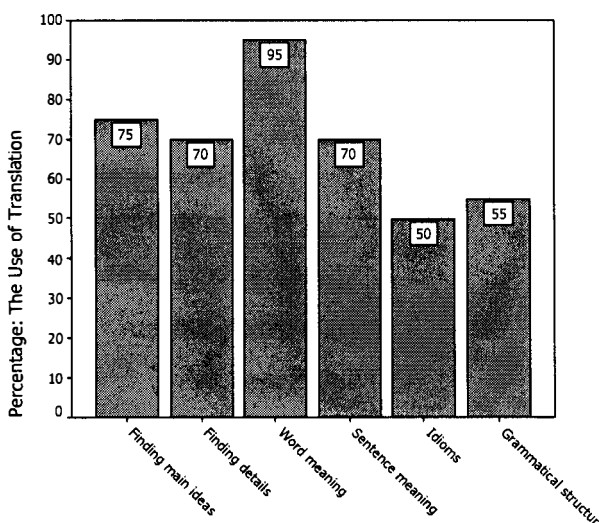


Figure 26 Use of translation

Almost all the students use translation into Thai for word meaning, while three out of four also use it for finding main ideas and details as well as with sentence meaning. Slightly more than half of them use it for grammatical structure and half for idioms.

8.1.2.3 The advantages of the use of Thai

Students report that thinking in Thai helps them most when they encounter problems in several areas as shown in Figure 27.

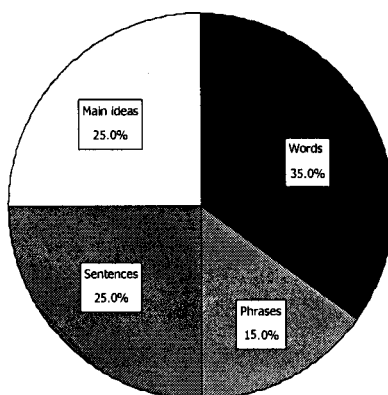


Figure 27 Area of greatest assistance

Figure 27 shows that around one-third of the students indicate that thinking in Thai helps them most with the meaning of words and half of that number with the meaning of phrases. Another quarter think that Thai helps them most with the meaning of both sentences and main ideas.

If we compare the results from Figures 26 and 27, the most important use of Thai during reading is for using bottom-up skills to find the meaning of words. Half of the students also indicated that another bottom-up area of finding grammatical and idiomatic meaning required the use of Thai. However, figures for sentences and main ideas are also high, indicating that many students go beyond word, phrase and grammatical meanings by using Thai to achieve more global understanding.

8.1.3 Student reading habits and interests

Students report their habits in reading the English texts as well as their interests as shown in Figures 28 and 29.

8.1.3.1 Student reading habits

Next figure shows the students' habits at the beginning of reading.

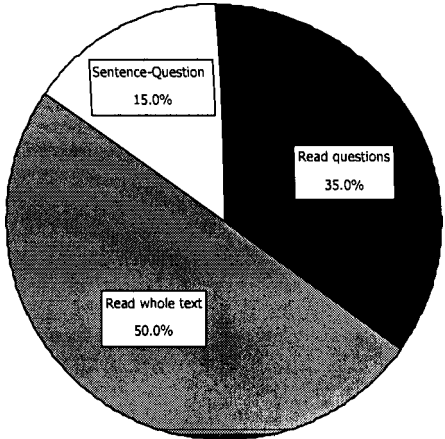


Figure 28 Habits at the beginning of reading

Figure 28 shows that when students are reading unfamiliar texts, half of them read the whole text before answering the question while about one-third do the reverse. Only 15% of them read a sentence or two and then a question and none of them reads the questions and underlines unknown words.

8.1.3.2 Student interests

Figure 29 illustrates student interests about reading each type of texts.

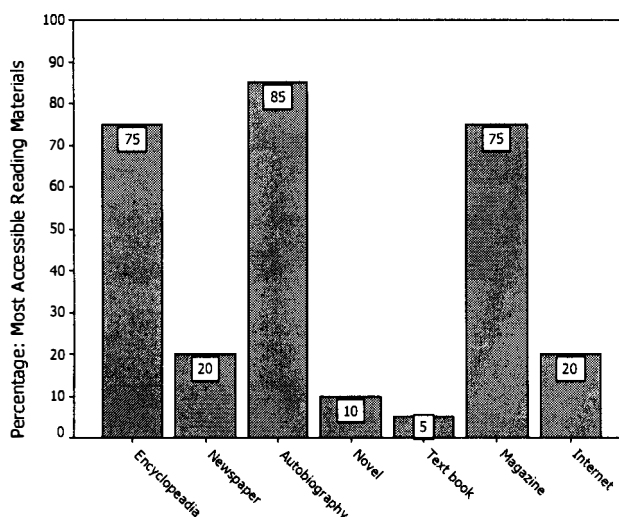


Figure 29 Most accessible reading materials

In regard to student interest about reading materials, most students think that the texts from autobiographical books are easy to understand and three quarters of them find the texts from encyclopedias as well as from magazines suitable. Less popular are the texts from newspapers with 20% support, whereas only 10% think that those from novels are easy and 5% indicate that it is easy to understand text books.

The analysis from Figures 23 and 24 reveals that half of the students usually used translation and almost half students used translation all the time while reading. The majority of students also usually thought in Thai while reading and one quarter of them thought in Thai all the time. These results indicate that the majority of students thought and used translation into Thai while reading English texts. Figures 25, 26 and 27 show that the majority students thought the Thai language helped their comprehension of English reading while other students considered it provided some help. Indications are that Thai was used for assistance with a wide range of both bottom-up and top-down skills including finding meaning of words, main ideas, details, sentences, grammatical structures and idioms. However, when asked to select the main usage, half the students thought that Thai helped them most with the meaning of words and phrases while only half that number thought that it helped them most with the meaning of sentences and

main ideas. Overall, however, result shows that the perception of Thai students is that Thai helped retrieve meaning and formulate ideas while reading.

If we turn to the final part of the interview, the analysis from Figures 28 and 29 provides information about student habits and interests in relation to reading. Half the students read the whole text at the beginning of each reading task while slightly fewer read the questions first. Only a few students alternated reading the text and the question. The result also shows that most students thought that reading texts selected from autobiographical books, encyclopedias, and magazines were easy to understand. However, the number that nominated texts from newspaper, the internet, novels and text books at 20%, 20%, 10% and 5% was very low. It should be noted too that the percentages for the three text types used in this study were according to this questionnaire in order of acceptability, 85% for autobiographical materials, 75% for encyclopedia extracts and 20% for newspaper materials. This range will be followed up in the later discussion of response to the text types.

8.2 Student interview (Part B)

This part of the chapter relates to the qualitative data from the interview held with the students soon after completing the questionnaire. The students had to write down their feelings about using Thai when reading English, the reasons for trying or not trying to think in English more while reading as well as the ideas about reading Thai context texts compared with non-Thai context texts.

The results are divided into two categories: the advantages of using Thai and student reading habits and interests and then visually shown in pie chart form accompanied by a brief explanation of the result.

8.2.1 The advantages of using Thai

The next figures displayed the advantages of using Thai relates to students' feelings.

8.2.1.1 Feelings of students when using Thai while reading

Students report their feelings when thinking in Thai while reading as illustrated in Figure 30.

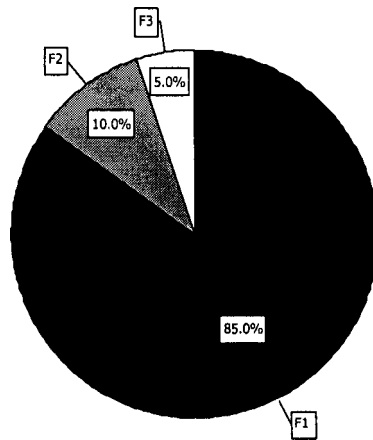


Figure 30 Feelings about using Thai while reading

Key: F1= easy to understand texts
 F2= happy with reading
 F3= confident with reading

Figure 30 shows that most students have positive views about the value of using Thai when reading. Moreover, the feelings of the remaining 10% are even more positive as indicated by the fact that they say that they are happy or confident when using Thai.

8.2.1.2 Feelings of students when thinking only in English

The next figure shows the feelings of the students when thinking in only English.

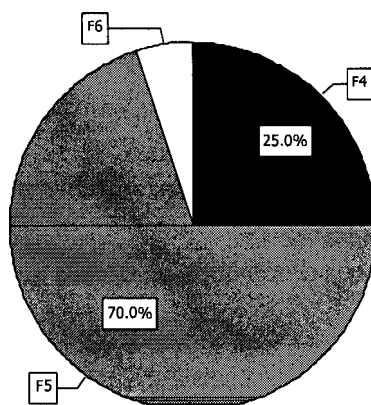


Figure 31 Feelings of readers thinking only in English

Key: F4= difficult to understand texts
 F5= uncomfortable with reading
 F6= unsure with reading

Figure 31 shows that most students admitted to feeling uncomfortable with reading when they have to think only in English and cannot use Thai while reading. One in four thinks that it is difficult to understand texts without using Thai and a few of them admitted to feeling unsure.

8.2.1.3 Opinions about increased thinking in English while reading

Figure 32 displays the students' opinions about thinking in English while reading English texts.

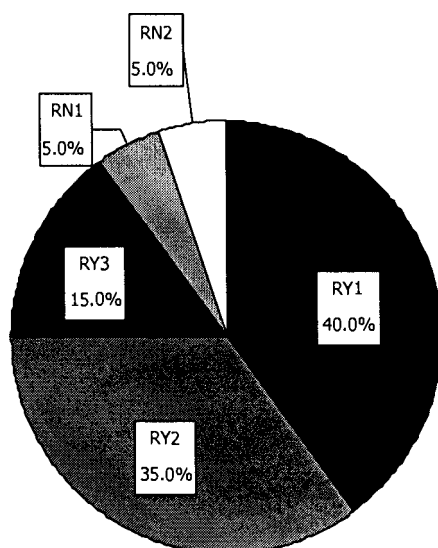


Figure 32 Agreement/disagreement about thinking in English more

Key: RY = students agree that they should try to think in English more while reading
 RY1= because students could improve their reading skills
 RY2= because students could read and understand texts quickly
 RY3= because students could find the answers quickly
 RN = students disagree that they should try to think in English more while reading
 RN1= because it was unnecessary for the thinking process
 RN2= because thinking in Thai was easier than thinking in English and students could understand texts easily

Figure 32 shows that the majority of the students indicated that they should try to think in English more while reading whereas only a few students held a contrary view. Nearly half of the students thought that they could improve their reading skills and about a third of them thought that they could read and understand texts quickly, if they thought in English more. A few of them thought that they could find the answers quickly by thinking in English. Those who rejected the idea of trying to think in English more, considered that this was unnecessary for the thinking process and as thinking in Thai was easier than thinking in English; the students could understand texts easily.

8.2.2 Student reading habits and interests

Students reported their views about reading Thai and non-Thai context texts together with their habits of thinking in Figure 33.

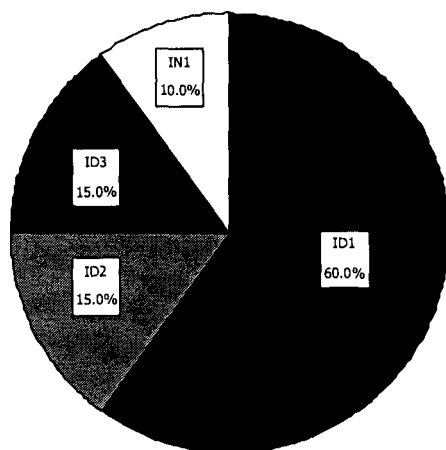


Figure 33 Views about textual cultural background

Key: ID = students felt different when they read Thai context texts compared with non-Thai context texts

ID1= it was easier to understand Thai context texts because of familiarity

ID2= it was easy to read Thai context texts but the others were difficult

ID3= it was easier to understand Thai context texts because students could understand Thai culture and way of life

IN = students did not feel any different when they read Thai context texts compared with non-Thai context texts

IN1= because both kinds of texts were concerned with new knowledge and students used the same thinking process in both of these for finding the answers

From Figure 33, which makes a comparison between reading the Thai and the non-Thai context texts, most students felt there were differences, whereas a few of them disagreed. More than half of the students showed the reasons for the former idea that it was easier to understand Thai context texts than one about another country because of their familiarity with the Thai situation. A few of them explained this further saying that it was easier to understand Thai context texts because they could understand Thai culture and way of life. The same number thought that it was easy to read ones dealing with Thailand but it was difficult to read those relating to other societies. An alternative view was given by those who mentioned that both kinds of texts were concerned with new knowledge necessitating the same thinking process for finding the answers.

The analysis from Figures 30 and 31 indicates that most students felt that it was easy to understand texts when they used Thai to help them with reading in English and some of them were happy and confident when using Thai. In contrast to this however, most of them felt uncomfortable if they had to think only in English and could not use Thai. The fact that the remainder either thought that it was difficult to understand texts or they lacked confidence without using Thai shows that Thai students prefer to use Thai for helping them to comprehend unfamiliar texts. On the other hand the indication from Figure 32 analysis is that most students indicated that they should try to think in English more while reading. This is because English could help them improve their reading skills, or they could read and understand texts quickly as well as find the answers easily. Only very few of them did not express a wish to think more explaining this on the grounds that it was unnecessary for the thinking process and they also thought that thinking in Thai was easier than thinking in English and they could understand texts easily. This result shows that most students have the desire to develop their ability to think in English as a way to improve their reading skills.

To summarise student interests about text types, the great majority of students expressed the view that there were differences between reading both types of texts. The former group of students indicated that it was easier to understand Thai context texts because of their familiarity with the Thai context as well as Thai culture and way of life. Some also thought there was a difference in language level, texts about Thailand being easier to read. This result tends to show that texts about Thailand were more appealing to Thai students.

8.3 Summary

In the student questionnaire, all students report that they thought and used translation into Thai while reading English texts and the majority of students thought the Thai language helped them much with their comprehension of English reading. The results indicate that Thai was used for assistance with a wide range of both bottom-up and top-down skills including finding the meanings of words, main ideas, details, sentences, grammar structures and idioms. Students also mentioned that Thai helps them most with the meaning of words, the meaning of sentences, main ideas and the meaning of phrases. For the student habits, half the students read the whole text at the beginning of each reading task while slightly fewer read the questions first. Only a few students alternated reading the text and the question. The result also shows that most students thought that reading texts selected from autobiographical books, encyclopedias, and magazines were easy to understand. In addition, the percentages for the three text types used in this study were according to this questionnaire in order of acceptability, 85% for autobiographical materials, 75% for encyclopedia extracts and 20% for newspaper materials.

From the interview, the results show that most students felt that it was easy to understand texts when they used Thai to help them with reading in English and some of them were happy and confident when using Thai. In contrast, most of them felt uncomfortable if they had to think only in English and could not use Thai while the remainder thought that it was difficult to understand texts and they lacked confidence without using Thai. When asked about thinking in English more, students gave the view they should try to think in English more while reading, because English could help them improve their reading skills, or they could read and understand texts quickly as well as find the answers easily. Only very few of them did not want to think in English, because they thought that it was unnecessary and the alternative was easier. This result shows that most students have a desire to develop their ability to think in English as a way to improve their reading skills.

In regard to student interests about text types, it appears that students had a different experience when reading Thai and non-Thai context texts. They mentioned that it was easier to understand Thai context texts, because of their familiarity with the Thai context as well as Thai culture and way of life. Some also thought there was a difference

in language level, texts about Thailand being easier to read. On the other hand, a small number of students thought that since both types of texts were concerned with new knowledge, they needed to use the same thinking process for both. This result tends to show that texts about Thailand were more appealing to the Thai students.

The next chapter will discuss the results from chapters 4, 5, 6, 7 and 8.

CHAPTER NINE

FINDINGS AND DISCUSSION

Teaching and learning English at tertiary level in Thailand is not always successful and it is in the area of reading that this is of special concern. Low levels in competency in second language reading hinder students from understanding English texts. Many factors are responsible for this and this study is an attempt to gain more knowledge of the actual student experience of reading. Mental translation and the role of the first language, Thai, in second language reading comprehension to assist the comprehension of the English texts were examined in order to gain evidence for teaching English as a second/foreign language for Thai students. Information about the extent and both positive/negative effects from the use of Thai in L2 reading will provide guidance for the teachers to support students to use those strategies. Moreover, actual problems from the reading of the texts were analysed in order to gain insights for helping teachers and learners in teaching and learning English reading comprehension for Thai students.

Within the study, information was obtained about the use of Thai and problems arising when twenty teacher trainee students at Udon Thani Rajabhat University, Thailand were reading transactional texts, editorial texts and narrative experiential texts. The students completed three reading comprehension tasks, each of which consisted of questions about two texts, one a culturally familiar text or a Thai context text and the other a culturally unfamiliar text or a non-Thai context text. Views of the students were also obtained by means of interviews and a questionnaire. In this chapter, the quantitative and qualitative findings from chapters 4, 5, 6, 7 and 8 are gathered together to answer the research questions and then issues arising from these answers are discussed.

9.1 Research questions

Answers to the following research questions will provide the information necessary to gain insights into aspects of the reading process related to Thai undergraduates.

1. The use of Thai in reading comprehension

1.1 To what extent do the students use Thai when reading English?

1.2 To what extent does the use of Thai vary according to genre and text type determined by content?

1.3 To what extent does the use of Thai vary according to question type that is with bottom-up and top-down questions?

1.4 Does a stated preference for text type have any effect on scores?

1.5 With which genre and text type do the students obtain better scores?

1.6 What opinion do the students hold about the use of Thai and how Thai assists reading comprehension?

2. The use of strategies in reading comprehension

2.1 What strategies do the students use when reading English?

2.2 Is the use of Thai in implementing strategies linked to the students attainment of better scores?

2.3 Is the use of formal schema or content schema more prominent?

3. The identification of problems in reading comprehension

3.1 What problems do students face when reading English texts?

The findings of quantitative data from chapters 4, 5, and 6 are presented to answer research questions 1.1, 1.2, 1.3, 1.4 and 1.5 whereas both qualitative and quantitative data from chapters 4, 5, and 6 are presented to answer research questions 2.1, 2.2 and 2.3. The quantitative and qualitative findings from chapter 8 are reported to answer research question 1.6. In addition, the findings about reading problems from chapters 4, 5, 6 and 7 are utilised in answer to research question 3.1.

Research question 1: The use of Thai in reading comprehension

Question 1.1: To what extent do the students use Thai when reading English?

The findings for this question are derived from the analysis of student introspection about their responses to reading comprehension tasks 1, 2 and 3. For the data from introspection, the students were asked to write down either in Thai or English how they got the answer for each question immediately after answering each question. Furthermore, during the retrospective interviews, the students were asked identify which

language they used to assist their comprehension as well as how they got the answer for each question.

The results reveal that the students most frequently used only Thai to assist their comprehension with one of the transactional texts, the non-Thai context transactional text. In this case the usage of Thai was as high as 75% whereas a slightly lower percentage, 70%, used Thai for the Thai context text of the same genre. For both narrative experiential texts, the usage was also 70% while for both editorial texts it was slightly lower at 65%. However, since the remaining students reported using a mix of both Thai and English to facilitate their comprehension, the overall usage of Thai was higher than the average of 69% and can be estimated at around 84%, because of this mixed usage by some students. The study therefore show that Thai was the major language of thought for these students with most students thinking only in Thai to unravel the meaning of these texts, while around one in four were using both languages to solve their problems.

Question 1.2: To what extent does the use of Thai vary according to genre and text type determined by content?

The analysis of the use of Thai according to genre and text type determined by content is presented together for answering this question because the description of the findings in this way is clearer since the genre type relates to both categories. The results for resorting to the strategic use of Thai to facilitate comprehension reveal that the students frequently used Thai for all genres, transactional, editorial and narrative experiential texts, and both text types, culturally familiar and unfamiliar texts.¹ The most frequent mention of the use of Thai to assist the students' comprehension was for the Thai transactional text at 1.15 times per question. The second and the third most frequent use of Thai were for both narrative experiential texts at 1.10 times per question for both non-Thai and Thai texts. The use of Thai for the other texts was moderately frequent at 1.04, 1.03 and 1.00 times per question for the non-Thai transactional text, the non-Thai and the Thai editorial texts respectively. This means that students tended to use Thai to

¹ The average frequency for using Thai for all the questions in each text type has been calculated from the frequency of the mention of these strategies by all students and divided by twenty, the total number of students and then by ten, being the number of questions in each task. The figure appears to be high since most students made more than one mention of the use of Thai in a single question.

activate several strategies of using Thai to derive the answers to each of the questions and that there was little difference according to either text type or text content.

Question 1.3: To what extent does the use of Thai vary according to question type that is with bottom-up and top-down questions?

The findings show that the students frequently resorted to the strategy of using Thai to help their comprehension for both question types, top-down and bottom-up. For transactional texts, it was apparent that the students used Thai more often for top-down questions than bottom-up questions for both texts²; that was, an average of 1.23 times for each top-down question and 1.07 times for each bottom-up question for the Thai text and 1.07 times and 0.97 time for the two types respectively for the non-Thai text. Conversely, for editorial and narrative experiential texts, the results reveal that the students used the strategies a little more often for bottom-up questions than top-down questions. The average of using Thai per question for editorial texts was 1.04 and 0.93 times for bottom-up and top-down questions respectively for the Thai text, and 1.03 and 1.0 times respectively for the non-Thai texts. The figures for narrative experiential texts were 1.13 and 1.06 times respectively for each bottom-up and top-down questions for the Thai text, whereas they were 1.15 and 1.05 times respectively for the non-Thai text.

These findings show that the students tended to use Thai more frequently for top-down questions than bottom-up questions for both transactional texts. On the other hand, students used Thai more frequently for bottom-up questions for both editorial texts and both narrative experiential texts.

² The average frequency for using Thai for both question types in each text type has been calculated from the frequency of the mention of these strategies by all students and divided by twenty, the total number of students and then by the number of each question type in each task. The figure appears to be high since most students made more than one mention of the use of Thai in a single question.

Question 1.4: Does a stated preference for text type have any effect on scores?

In relation to preference for text type, the findings show that most students prefer the culturally familiar texts or the Thai texts and scored better on two out of the three genres. However, the preference for text type did not show statistically significant differences.

When a mixed factorial ANOVA was used to analyse the differences between the scores according to preference for transactional texts, no statistically significant differences were found for the differences between the scores according to preference for transactional texts ($F_{(1,17)} = 2.993$, $p = 0.102$), as well as the differences between the three preference groups ($F_{(1,17)} = 0.239$, $p = 0.790$), and finally no interaction between the preference for transactional text and type of text was forthcoming ($F_{(1,17)} = 0.284$, $p = 0.756$). For editorial texts, although the effect of text type was highly significant ($F_{(1,18)} = 26.947$, $p < 0.001$), the main effect of preference on scores was not significant ($F_{(1,18)} = 0.255$, $p = 0.620$), and no interaction was found between preference and text type ($F_{(1,18)} = 0.514$, $p = 0.483$). In addition, although the effect of text type for narrative experiential texts was highly significant ($F_{(1,18)} = 11.861$, $p = 0.003$), the main effect of preference was not significant ($F_{(1,18)} = 0.389$, $p = 0.541$), and no interaction was found between preference and text type ($F_{(1,18)} = 1.375$, $p = 0.259$).

Although the students expressed moderately strong preferences for the three culturally familiar texts, the Thai context texts, they performed a little better on only two of these texts; that is, editorial and narrative experiential texts. For the transactional texts, despite positive preferences for the Thai text, scores were slightly higher for the non-Thai text.

Question 1.5 With which genre and text type do the students obtain better scores?

Amongst the three genres, the students obtained the highest scores with the narrative experiential texts and gained the lowest ones with the editorial texts. This was borne out by the mean scores of 22.95, 19.65 and 13.87 out of 50.00 for narrative experiential, transactional and editorial texts respectively. The results also show that the students obtained better scores for the culturally familiar texts than the culturally unfamiliar texts for two genres only, the narrative experiential texts and the editorial

texts. Conversely, the students performed better for the non-Thai one for transactional text.

When a paired sample T-test was used to analyse the differences between the scores of the Thai and the non-Thai context texts for the highest scoring narrative experiential texts, there were statistically significant differences ($p < .05$) between the two texts in all aspects, total task scores ($t = 7.225$, $df = 19$, $p < 0.001$, two-tailed), question scores ($t = 8.312$, $df = 19$, $p < 0.001$, two-tailed), and sentence scores ($t = 2.230$, $df = 19$, $p = 0.032$, two-tailed). For the lowest scores in the editorial texts, the students obtained higher scores with the Thai texts than the non-Thai texts for total task scores and question scores. When a paired sample T-test was used to analyse the differences between the scores of the Thai and the non-Thai context texts for editorial texts, the results show that there were statistically significant differences ($p < .05$) between the two text types for task scores ($t = 6.029$, $df = 19$, $p < 0.001$, two-tailed) and question scores ($t = 6.398$, $df = 19$, $p < 0.001$, two-tailed) but no statistically significant differences ($p > .05$) between two text types for sentence scores ($t = 1.191$, $df = 19$, $p = 0.248$, two-tailed). For transactional texts, it appears that the students attained higher scores with the non-Thai text than the Thai text in all aspects. However, when a paired sample T-test was used to analyse the differences between the scores of the Thai and the non-Thai context texts for transactional texts there were no statistically significant differences ($p > .05$) between the two text types for task scores ($t = -1.816$, $df = 19$, $p > .085$, two-tailed), question scores ($t = -1.584$, $df = 19$, $p > .130$, two-tailed) and sentence scores ($t = -1.333$, $df = 19$, $p > .198$, two-tailed). Both the small sample size and variability of students precluded a significant effect.

The scores of the culturally familiar texts or the Thai context texts and those of the culturally unfamiliar texts for both narrative experiential and editorial texts revealed statistically significant differences. In the case of the remaining texts, the scores of the culturally unfamiliar text or the non-Thai context transactional text were only slightly higher than those for the Thai context text and they were not statistically significant different when a paired sample T-test was used to analyse the differences between the scores of the two texts. The overall result, therefore, indicates that the textual context has some effect upon scores in comprehension tasks.

Question 1.6: What opinion do the students hold about the use of Thai and how Thai assists reading comprehension?³

To answer this question the quantitative and qualitative results are derived from data analysis of the questionnaire and the interview in chapter 8. The students had to fill in the first part of the questionnaire about the frequency of Thai usage in terms of both translation and thought processes, the advantages of using Thai, and student reading habits and interests. For the second part, the advantage of using Thai was the topic canvassed.

For the data relating to the frequency of the use of Thai it appears that 40 % of the students used translation from English into Thai all the time while reading, 50% reported usually using translation, while only a few seldom used translation. For the more extended use of Thai in thinking in Thai while reading, 25% of the students thought in Thai all the time whereas 60% of them usually thought in Thai while reading. Only a few students reported thinking in Thai sometimes and even fewer seldom used it.

In terms of views of the type of advantage gained, the findings show that a majority of students at 70% thought that Thai greatly helped their comprehension of English when reading, whereas the remaining 30% considered Thai was of some assistance for English comprehension. Frequent resort to the first language by around one-third of the students helped them most with the meaning of words followed by the meaning of phrases. One in four thought that Thai helped them most with the meaning of both sentences and main ideas. In addition, students mentioned that translation into Thai greatly helped them with word meanings, finding main ideas and details, sentence meanings, grammatical structure and idioms.

Analysis of student feelings in relation to the use and non-use of Thai while reading reveals that around 85% of students believed that the use of Thai helped them understand texts. Of the remainder 10% indicated that if they used Thai they were happy and 5% stated they would feel confident. In contrast, when they had to think only in English and could not use Thai while reading, 70% of students admitted to feeling uncomfortable.

³ These findings are different from findings for research question 1.1 (see page 225-226) because those for question 1.1 are derived from the answers for each question in the reading comprehension tasks given in retrospective interviews whilst this answer is based on different data from chapter 8.

Another 25% or so reported that it was difficult for them to understand texts without using Thai while the remaining few admitted to feeling unsure.

At the same time, however, the students were aware of a need to use more of the target language while reading. The majority of the students indicated that they should try to think in English more while reading, leaving only a few with the contrary view. Nearly half of the students thought that they could improve their reading skills and about a third of them thought that they could read and understand texts quickly, if they thought in English more. A few stated that they could find answers quickly by thinking in English. Some students, however, rejected the idea of trying to think in English for the reason that they considered it unnecessary for the thinking process. Thinking in Thai was easier and would be of more benefit to them.

Research question 2: The use of strategies in reading comprehension

Question 2.1: What strategies do the students use when reading English?

The findings for this question are derived from the analysis of qualitative data from chapter 4, 5, and 6. The results show that the students tended to use Thai to assist their comprehension of texts when they encountered difficulties in reading those texts. As student S01A reported

“I usually think in Thai when I cannot translate the meaning of words....when I don't have background knowledge about texts. When I don't know the word I have to think in Thai.”

The students tried to use several strategies to overcome the difficulties. However, the following list of strategies used has not resulted from prior instruction in class or prompts. It is derived from the actual words of the students themselves while actually reflecting on their reading of the texts. Eight strategies were identified from the qualitative data in this study:

- S1 to translate a word or a phrase itself,
- S2 to examine or think about the context of words or phrases or guess the meaning from context,
- S3 to understand the meaning of the sentence or find a reason,
- S4 to confirm understanding about the sentence,
- S5 to compare the English with the Thai grammar by using formal schema,

- S6 to access or find the reader's ideas by using content schema,
- S7 to construct or formulate ideas, and
- S8 to summarise ideas.
- S0 no use of Thai

In the following two paragraphs, comment is made on the most common strategies and their relationships to both text types and question types.

The students reported using different strategies of the Thai usage to assist their understanding while reading. The foremost strategy used for all genres and all texts was *S2 to examine or think about the context of words or phrases or guess the meaning from context*. However, it was apparent that the extent of the usage was also related to genre and text content. Important strategies for the Thai transactional text were *S7 to construct ideas* and *S6 the use of content schema* whereas *S3 to understand the meaning of the sentence or find a reason* and *S1 to translate a word or a phrase itself* were used for the non-Thai one. Essential strategies for the Thai editorial text were *S3 to understand the meaning of the sentence or find a reason* and *S1 to translate a word or a phrase itself* whereas *S3 to understand the meaning of the sentence or find a reason* and *S7 to construct ideas* were used for the non-Thai one. Leading strategies for the Thai narrative experiential text were *S3 to understand the meaning of the sentence or find a reason* and *S6 to use content schema* whereas *S3 to understand the meaning of the sentence or find a reason* and *S7 to construct ideas* were often used for the non-Thai one.

For top-down and bottom-up questions, the foremost strategy used for both top-down and bottom-up questions in all texts was again *S2 to examine or think about the context of words or phrases or guess the meaning from context*. Leading strategies for top-down questions for the Thai texts were *S3 to understand the meaning of the sentence or find a reason*, *S6 the use of content schema*, and *S7 to construct ideas* and those for the non-Thai texts were *S3 to understand the meaning of the sentence or find a reason*, *S7 to construct ideas*, *S8 to summarise ideas*, and *S5 the use of formal schema*. Essential strategies for bottom-up questions for the Thai texts were *S1 to translate a word or a phrase itself*, *S7 to construct ideas*, *S5 to use formal schema*, *S3 to understand the meaning of the sentence or find a reason* whereas those for the non-Thai texts were *S1 to translate a word or a phrase itself* and *S3 to understand the meaning of the sentence or find a reason* and *S7 to construct ideas*.

In addition, certain combinations of strategies were useful when the students could not rely on single strategies. These patterns of the useful combinations of strategies were as follows:

- For the Thai context transactional text, the useful combinations of strategies were *S6 to use content schema* and other strategies and *S7 to construct or formulate ideas* and other strategies.
- For the non-Thai context transactional texts, the useful combination of strategies was *S7 to construct or formulate ideas* and other strategies.
- For the Thai context editorial text, the useful combinations of strategies were *S5 to use formal schema* and other strategies and *S6 to use content schema* and other strategies.
- For the non-Thai context editorial text, the useful combination of strategies was *S5 to use formal schema* and other strategies.
- For the Thai context narrative experiential text, the useful combinations of strategies were *S6 to use content schema* and other strategies and *S8 to summarise ideas* and other strategies.
- For the non-Thai narrative experiential text, the useful combinations of strategies were *S5 to use formal schema* and other strategies and *S8 to summarise ideas* and other strategies.

The next table is a summary of major strategies used for each genre, text type and question type. A strategy was determined as major if students used it often, but in most cases the list was limited to the top three strategies in each category.

Table 81 Summary of major strategies

Text Type	Transactional Texts		Editorial Texts		Narrative Experiential Texts	
	Thai Text	Non-Thai Text	Thai Text	Non-Thai Text	Thai Text	Non-Thai Text
Major Strategies for the Texts	S2	S2	S2	S2	S2	S2
	S7	S3	S3	S3	S3	S3
	S6	S1	S1	S7	S6	S7
	S6+others	S7+others	S5+others	S5+others	S6+others	S5+others
	S7+others		S6+others		S8+others	S8+others
Major Strategies	S2	S2	S2	S2	S2	S2
	S6	S3	S3	S3	S3	S3
Top-down Questions	S3, S7	S7	S7	S8	S6	S5
Major Strategies	S2	S2	S2	S2	S2	S2
	S1	S1	S1	S3	S3	S1
Bottom-up Questions	S7		S5	S1, S7	S1	S3

The foremost strategy for all genres, text types and question types was S2 and other leading strategies were S3 and S1.

Question 2.2: Is the use of Thai in implementing strategies linked to the students attainment of better scores?

In order to answer this question, marks were first divided into pass and fail answers. According to the marking system, each answer was marked out of 2. Where the student was able to comprehend the text and answer the question with at least a reasonable degree of understanding, a score of 2, 1.5 or 1 was awarded and these marks are taken as indications of better scores. Conversely, a score of .5 or 0 was given to those students having difficulty with comprehension and these are now used for comparison with the better scores.

The findings for this question show that the strategies of using Thai were of moderate assistance to students in their efforts at comprehending the texts. For both transactional texts, the Thai editorial text and the non-Thai narrative experiential text, results reveal that strategy use contributed to their success in comprehending the text in around half the cases. For the Thai narrative text, the students showed the highest

positive influence of strategy usage. This represented approximately 65 percent of scores whereas the lowest percentage for better scores of approximately 27 percent was represented by the non-Thai editorial text.

Besides the frequency of the effect of strategy usage, the influence of particular strategy usage on scores has been calculated. The most useful strategy for all texts was the most common strategy, *S2 to examine or think about the context of words or phrases or guess the meaning from context*. Other useful strategies were *S1 to translate the word or phrase itself*, *S3 to understand the meaning of the sentence or find a reason*, *S5 to use Thai formal schema to compare the English with the Thai grammar*, *S6 to use content schema to access or find the reader's ideas*, *S7 to construct or formulate ideas*, and *S8 to summarise ideas*.

Moreover, multiple strategies could also assist student comprehension. Useful multiple strategies included the combinations of *S6 to use content schema to access or find the reader's ideas and other strategies*, *S5 to use Thai formal schema to compare the English with the Thai grammar and other strategies*, *S7 to construct or formulate ideas and other strategies*, and *S8 to summarise ideas and other strategies*.

The use of Thai in relation to ability level in these tasks overall shows that the percentage of the use of strategies by students in all score groups, high, medium and low was similar. However, in relation to the foremost strategy, *S2 to examine or think about the context of words or phrases or guess the meaning from context*, the percentage indicates that the students in the high group tended to use this strategy more often than the students in the low group at least in the case of both transactional texts.

Question 2.3: Is the use of formal schema or content schema more prominent?

The use of formal schema or language transfer and content schema in L2 reading is pertinent to this study because of the use these two kinds of schemata play in providing L2 assistance to the readers. Evidence from their use while reading, can be utilised by the teachers of English as a second or foreign language to assist their students in reading L2 texts. Formal schema or language transfer concerns the knowledge of language while content schema concerns the knowledge about the world or background knowledge of the readers. The findings for this question are derived from the mention of strategies found in both the reading comprehension tasks and the retrospective interviews.

Table 82 The use of formal and content schemata

	Text Types	More Prominent Schema Strategy		Multiple Strategies
		Top-down	Bottom-up	
Transactional Texts	Thai Text	Content Schema	Same (Very low)	Content Schema
Editorial Texts	Non-Thai Text	Formal Schema	Formal Schema	Formal Schema
Narrative Texts	Thai Text	Formal Schema	Formal Schema	Formal Schema
Experiential Texts	Non-Thai Text	Formal Schema	Formal Schema	Formal Schema

When consideration is given to the strategy list in Table 82, results reveal that language transfer or formal schema was prominent for some kinds of texts and question types. The students in this study used Thai formal schema to compare the English and the Thai grammar more often than content schema with both top-down and bottom-up questions for all of the non-Thai texts as well as Thai editorial texts. For the multiple strategies use, the combinations of formal schema and other strategies were more prominent for all non-Thai context texts and both editorial texts.

From the same Table, content schema was more prominent than formal schema with top-down questions for the Thai transactional and the Thai narrative experiential texts as well as with bottom-up questions for the Thai narrative experiential text. For the multiple strategies use, the combinations of content schemas and other strategies were more prominent for the Thai context transactional and the Thai context narrative experiential texts. Besides, the combinations of content schema and other strategies were a little less prominent than the combinations of formal schema and other strategies for the Thai context editorial text. (Also see chapter 4 pages 87-92, chapter 5 pages 131-136, and chapter 6 pages 176-182.)

To sum up, the findings from both single and multiple strategies use reveal that formal schema was more prominent for the non-Thai context texts than the Thai ones

whereas content schema was used more frequently with the Thai context texts than the non-Thai ones. However, content schema was less prominent than formal schema for both editorial texts.

Research question 3: The identification of problems in reading comprehension

Question 3.1: What problems do students face when reading English texts?

The findings for this question are derived from the analysis of the answers to questions 1-10 in each of the reading comprehension tasks together with the analysis of student responses to the selected sentences from the same tasks. Content analysis from these sources shows that the students confronted many problems in reading L2 texts.

From an analysis of the answers from each question type, it appears that students had the most serious problems with figurative questions for both transactional texts, literal, figurative, global and cohesive questions for the non-Thai editorial texts, and literal questions for the non-Thai narrative experiential text.

Problems from answering the questions in the reading comprehension tasks were found to be more wide ranging than those from sentences. This was because the focus on only six sentences instead of the larger texts in the latter question type meant that fewer possibilities existed for problems to arise. Problems from both these sources have now been divided into five categories according to whether they related to semantics, syntax, grammar, punctuation and comprehension technique. In the last two columns of the summary table, it should be noted that the first list is the more comprehensive one and that there is some overlap. However, the areas of commonality between the two sources will provide topics for later discussion.

Table 83 Synthesis of reading problems

Aspect	Problem Area	Question Data	Sentence Data
1. Semantics	1. cannot understand the word(s) in the question or cannot find the answer or word meaning	√√	√√
	2. Figurative language	√√	√√
	3. Over reliance on content schema	√	X
2. Syntax	4. Reference words	√√	√√
	5. Conjunctions	√	√√
	6. Ellipsis	X	√
	7. Nominalization	X	√
3. Grammar	8. Tense	√√	√√
	9. Subject/verb agreement	√√	X
	10. Double/participial adjectives	√√	X
	11. Parts of speech	√	√√
	12. Word order	√	√√
	13. Prefix / root	√	X
	14. Singular / plural	√	X
	15. Pronouns and possessive pronouns	√	X
	16. Passive voice	√	√√
	17. Verbs after preposition; participle/ gerund	√	X
4. Punctuation	15. Punctuation	√	√√
	16. Apostrophe "s"	√	√
	17. Phrase in apposition or relative clause with commas as well as extra information between two commas	√	√√
5. Comprehension Technique	18. Partial answers	√√	X
	19. Quoting directly from text	√√	X

Note: √√ = major problems⁴
 √ = minor problems
 X = no problem

In relation to the whole text difficulties, major problems for questions from the reading comprehension tasks were those with word meanings in the question or in the text together with figurative language, partial answers, quoting directly from text.

⁴ See chapter 4 pages 95-96, chapter 5 pages 139-140, chapter 6 pages 185-186, and chapter 7, Table 78 pages 201, Table 79 pages 205 and Table 80 pages 209 for how this categorisation was determined.

reference words, tenses, subject/verb agreement, and double/participial adjectives. For problems identified during the discussion of particular sentences, major problems were found with word meanings, figurative language, tenses, "ed" form of verbs, punctuation, reference words, conjunctions, parts of speech, word order, verbs after preposition or participle/gerund, and phrase in apposition or relative clause with commas as well as extra information between two commas.

The upshot of combining problems from both sources reveals that major problems were those with word meanings in the questions or in the text, figurative language, reference words and tense.

9.2 Discussion

The findings from the study presented here in reply to all the research questions have been concerned with the use of Thai in reading comprehension, assistance gained from the use of Thai to activate certain strategies, and the emergent reading problems for Thai students. As findings can be applied to the development of a greater understanding of the reading comprehension for Thai students at tertiary level in Thailand, this section will discuss the findings in terms of the major issues identified in the various sections of the findings.

In the section results will be organised to centre on three issues relating to the findings. These are student reaction to texts, student reading processes, and the student use of the first language in reading.

9.2.1 Student reaction to texts

The results from research questions 1.4 and 1.5, which attempted to discern variations in response to texts and genres, will be discussed in this section. When text types and genres vary they have different effects on reading comprehension. In this study, the researcher tried to choose texts to suit the language proficiency level of students and each pair of texts was selected in such a way that they would be similar in genre, topic and form yet differed in cultural context. Therefore, the findings related to these issues will be used to obtain evidence for teaching and learning L2 reading comprehension.

9.2.1.1 Texts and their backgrounds

In relation to preference for text type determined by content, the result shows that although most students preferred the culturally familiar texts or Thai context texts, the preference for text type did not show statistically significant differences as indicated by task scores. This result would appear to be in opposition to Krashen's affective filter hypothesis (Krashen, 1982, 30-32; 1985, 3-4), which suggests that students will perform better with input that is likely to make them feel confident and less anxious and perhaps more motivating. Preference for culturally familiar texts in the study did not appear to help students gain higher scores. However, such scores are a final product and do not themselves give any indication of the students' state of mind, in particular motivation, during the actual reading process. The following section on results from the scoring comparisons may cast further light on this issue.

Aside from preference, when comparing the scores of the culturally familiar texts or the Thai context texts and those of the culturally unfamiliar texts, the results are slightly contradictory. For both narrative experiential and editorial texts, statistically significant differences in the scores were obtained, indicating that students could attain better scores for the culturally familiar texts than the culturally unfamiliar texts for both these text types. This result is supported by the research about cultural content and reading proficiency of mainland Chinese and Hong Kong learners of English conducted by Chan (2003, 60-69). She found that intermediate Hong Kong learners could attain better scores than mainland Chinese learners with an English text which was familiar to the first group but unfamiliar to the latter. Other research about the effects of content schema, which shows that texts concerned with a matching cultural background, are better recalled by L2 readers than culturally unfamiliar texts on similar topics (Johnson, 1982, 503-516) also exists. However, in her research, Johnson made learners familiar with text content by discussion and vocabulary teaching prior to the reading test, rather than as in this case by means of text selection.

In contrast with these results, the scores for the culturally unfamiliar transactional text were slightly higher than the Thai ones. Some related research appears to support the view that background knowledge has no effect. Carrell (1983, 183-207), Lee (1986, 350-354) and Roller & Matambo (1992, 129-141), found that there was no effect for the role of context and their readers recalled unfamiliar texts better than familiar texts. However,

those research situations are different from this study because familiarity was not made a criterion for selection but again the researchers made unfamiliar content more familiar by involving the students before reading in a discussion about the topic. After reading they asked the students to give an oral summary of what they had read by means of recall protocols. Although many of the same processes are involved, in these other cases the text subject matter could be quite unfamiliar and the process of pre-teaching does not equate to the one studied here. What may have intervened to bring about the difference here is that a difference in text density may have been sufficient to counter preference.

It could be argued that therefore that this study gives some positive support for schema theory which predicts that when L2 readers have background knowledge about texts they read, they can perform on those texts better than if they have insufficient background knowledge. However, the anomaly of the transactional texts may need some further explanation. This may be found in the suggestion by Droop & Verhoeven (1998, 8), who discovered that cultural background knowledge had an effect, only when the linguistic complexity in the text was suited to the reading level of readers. If as it seems in this case the linguistic complexity in the Thai transactional text was at a higher level, background knowledge could not compensate. Alternatively, the application of the proverb "familiarity can breed contempt" might also be in operation. Some students in the present study, for example, reported using their background knowledge for the Thai transactional text and perhaps allowed this knowledge to replace the need to read carefully. This is supported by Carrell (1988, 102), who suggests that comprehension problems may be caused by over-reliance on knowledge-based or top-down processing.

9.2.1.2 Genres

In the study, students obtained the highest scores for the narrative experiential texts and the lowest ones for editorial texts with the scores for transactional texts being in the middle. This result points to the fact that narrative experiential texts tend to be the easiest genre for the readers in this case to understand. Because this genre is concerned with people's lives, this familiarity may help students' comprehension, especially in the case of the Thai text. Most students in the study, like the writer of the Thai story, have grown up in rural areas and they could therefore understand the author's experience in the Thai narrative experiential text easily. The non-Thai experiential text is also

concerned with an author's experience when she was young. For transactional texts, it appears that students found comprehension more difficult. This indicates that the academic writing style causes difficulties in comprehending texts even where the subject matter concerns the Thai capital. Both transactional texts may also not have been interesting or exciting for students, because they are concerned with cities and their history. However, the most difficult genre was the editorial one. Although editorial texts for this study were taken from a popular English newspaper published in Thailand, students gained very low scores for these texts, indicating possibly a disinterest in or lack of knowledge about current affairs. Backing for this point of view comes from the fact that the use of content schema was rare for both editorial texts. Therefore, the question of which genres connect best to students' lives and interests cannot be overlooked when planning a reading program.

It can be, therefore, assumed that genres and text type selection has an effect on reading comprehension. Thus, in this section materials used for L2 reading comprehension are discussed in order to find suitable ones for students, who will be teachers in a future. Firstly, authentic materials as used in this study are utilised because they can lead to positive outcomes and students can develop their communicative competence (Clarke, 1989, 119-132; Feng & Byram, 2002, 58-84; Hall, 2001, 231; Morton, 1999, 177-182; Peacock, 1997, 144-154). Secondly, humanistic materials which concern the readers' lives (Tomlinson, 2001, 1) can help students' comprehension. Thirdly, local materials should be suitable for L2 readers because global materials or culturally unfamiliar texts cannot match every student and cannot easily be the basis of real communicative activity (Clarke, 1989, 130). This is supported by Kramsch & Thorne (2002, 166), who argue that writers and publishers should link the global with the local in coursebooks and thus create glocal texts. Robertson (1995, 25-44) also confirms that such "glocal coursebooks" should be made available as they would be suitable for students and connect the world of students with the world of English. Texts should emphasise meaningful context related to real-world language use as well as the images of target cultures rather than forms of language (Byram & Esarte-Sarries, 1991, 180; Clarke, 1989, 119-132; Cortazzi & Jin, 1999, 196-219). In addition, Gray (2002, 165) suggests two approaches about the production of coursebooks for local markets, one being specific content texts for readers in that country and the other would be a core text.

which would appeal to several countries in the area by virtue of the relevance of the content to students in that part of the world.

9.2.1.3 The relationship between student English proficiency and their reading comprehension skills

General proficiency in a language is strongly related to reading skills (Bernhardt & Kamil, 1995, 3-4; Chan 2003, 60-69; Devine, 1988, 268-269). Scores indicated that even with these carefully selected texts students still had problems with the level of language. This is revealed by the major problems which emerged in relation to semantics (P1), and the inability to produce adequate paraphrases of the meaning even in Thai (P2 and P3). It is, therefore, reasonable to conclude that the problem is not so much with the questions or the marking scheme, but with the level of difficulty of the texts, especially in this type of situation where students had to work without help.

In other words, students in this level would have a greater chance to use their strategies effectively and score well if the texts were at a lower level. This relates to Krashen's input hypothesis (Krashen, 1985, 3-4) and comprehension hypothesis (Krashen, 2002, 395-404; 2004, 1-16), who believes that if students receive suitable input such as comprehensible texts they will acquire the L2. Bernhardt & Kamil (1995, 15-34) found that the student's L2 proficiency has a strong influence on the learning of the L2 and is a good predictor of success. Chan (2003, 60-69) also found that L2 proficiency played a very significant role in L2 reading comprehension. This is also confirmed by Devine (1988, 268-269) that the level of proficiency in L2 is important and that the knowledge of syntax enhances L2 reading ability. In addition, competence in L2 vocabulary is also related to reading skills. This can be obtained by explicit teaching (Nation, 1995, 5-7), learning through extensive reading (Coady, 1997, 225-237), learning from context by using clues in the texts to guess the meanings (Nation & Coady, 1988, 97-110) and guessing unknown words from local clues (Schmitt, 2000, 142-158).

It was not the aim of this research to test student proficiency but the research has revealed enough data to show that there was a mismatch between student proficiency levels and texts. This has had an effect not only on scores but on the ability of students to adequately use the resources that they had to solve problems. For example, the

effectiveness of strategy use and/or of the compensatory interaction between bottom-up and top-down skills is diminished.

9.2.2 Student reading processes

This study has highlighted certain cognitive processes associated with second language reading comprehension. This part will discuss the findings in relation to strategy usage and reading problems.

9.2.2.1 The use of strategies

Findings from research questions 1.3, 2.1, 2.2 and 2.3 show that students resorted to eight strategies of using Thai when decoding L2 texts to facilitate their English reading comprehension. This result supports ideas about language transfer which indicates that transfer is the process by which L2 learners use their previous skills from their L1 to facilitate comprehension or production in their L2 (Freeman & Freeman, 1994, 176; Jiang & Kuehn, 2001, 3; O'Malley & Chamot, 1990, 120). The process whereby students in this case transferred their L1 to L2 has been explained by Ringbom (1983, 207-212), who suggests that students transfer from a language in which they are more proficient to other language. Lakkis and Malak (2000, 26) also found with Arabic-speaking students that they relied on transfer of the appropriate usage of prepositions from Arab when they confronted English tasks in reading, writing, listening, grammar, vocabulary and idioms.

From an examination of the foremost strategy used for all texts in the study, it appears that S2- *to examine or think about the context of words or phrases or guess the meaning from context* fits this description. The second frequent strategy was S3- *to understand the meaning of the sentence or find a reason* for almost all texts whereas S7- *to construct or formulate ideas* was second frequent use for only Thai transactional text. Other leading strategies were S6- *to use content schema* for Thai transactional and Thai narrative experiential texts, S7- *to construct or formulate ideas* for Non-Thai editorial and non-Thai narrative experiential texts, and S1- *to translate a word or a phrase itself*. Related research conducted by Upton and Lee-Thompson (2001, 469-495) confirms the present study that students use their L1 to facilitate L2 reading in several ways. In their list of strategies which follows there is a strong similarity in the first four items with the possibility that the difference in the remaining two is the result of methodological

variation. Students in their study resort to their L1 when translating word or phrase meanings, wrestling with word or phrase meanings or syntactic structure, confirming comprehension of larger chunk of texts, wrestling with the meaning of chunks of texts beyond the phrase level, predicting or anticipating text structure or content, and monitoring text characteristics or reading behavior. In addition, Johnson and Ngor (1996, 123-140) stated that early readers develop and use such strategies because their L2 proficiency is insufficient for the L2 tasks.

Similarly, the foremost strategy for both bottom-up and top-down questions for all texts was S2- *to examine or think about the context of words or phrases or guess the meaning from context*. For top-down questions, the second most frequent strategies were S3- *to understand the meaning of the sentence or find a reason* whereas S6- *to use content schema* was the second most frequent strategy for only the Thai transactional text. For bottom-up questions, the second frequent strategies were S1- *to translate a word or a phrase itself* and S3- *to understand the meaning of the sentence or find a reason*.

This result points to the fact that students in this case relied on meaning in the texts by using bottom-up skills (S1-S4) in reading rather than top-down skills (S5-S8) even with top-down questions. For bottom-up processing, what is required is to look for meaning in the text and how the form of language in that text signals the meaning (Johnson & Ngor, 1996, 123-140). Related research, conducted by Davis and Bistodeau (1993, 459-472), found that readers used more bottom-up strategies, especially individual word recognition, when they read in their L2. The finding is also supported by Clarke's short circuit hypothesis. He states that when readers deal with L2 texts, the top-down processing of their L1 reading alters to bottom-up processing in their L2 and when they become skilled L2 readers, the use of top-down processing is increased (Clarke, 1980, 203-209). Other research about strategy use was conducted by Katib (1997, 139-140), who produced a descriptive study of Thai EFL students' comprehension by monitoring student strategies when reading in English. She found that translation from Thai to English, a bottom-up skill, was the most frequent strategy used from 28 strategies for the students in the lower proficiency group and the second most frequent strategy used for those in the higher proficiency group.

Although major strategies found in this study were bottom-up strategies, students occasionally made use of top-down strategies, that is, S5 - *to use formal schema*, S6 - *to use content schema*, S7 - *to construct or formulate ideas* and S8 - *to summarise ideas*, to compensate for deficiencies in bottom-up skills. This confirms the interactive theory of Stanovich (1980, 63), Anderson (1999, 2-3), Ringbom (1992, 101) and Grabe (1991, 378), who claim that readers who rely on higher level or top-down skills can compensate for deficiencies at lower level or bottom-up skills whereas readers who rely on bottom-up skills can compensate for any deficit in content knowledge at the top-down level. Hudson's research (1982) also indicates that effective knowledge-based or top-down processing can compensate for the lack of lower level knowledge in language.

For the frequency of the strategic use of Thai to facilitate English reading comprehension in this study, students tended to use strategies more frequently for top-down questions for both Thai and non-Thai transactional texts and Thai narrative experiential texts. Students may have tried to compensate for their inadequate global knowledge for answering the top-down questions in these texts by using their own strategies more often to comprehend high level of the texts. On the other hand, they used strategies more often for bottom-up questions for both Thai and non-Thai editorial texts and non-Thai narrative experiential texts. This result indicates that students tried to overcome bottom-up problems by using Thai more often to help their comprehension at the low level for these texts where scores indicate they were having more difficulty.

When changing the emphasis to the use of schemata, it appears that content schema tended to be useful for the Thai context texts whereas formal schema was an important strategy for the non-Thai context texts for both transactional and narrative experiential texts. However, formal schema was more prominent than content schema for both editorial texts. For schema theory, the most effective processing of text is an interaction between top-down and bottom-up processes (Rumelhart, 1977; 1980). In this study, even though as mentioned earlier students tended to rely on bottom-up processes, they also used schemata to assist their comprehension of the texts. As content schema was important for Thai texts, this indicates that their background knowledge about the Thai context was helpful. Therefore, they resorted to this background knowledge when interacting with familiar or Thai texts. This is in line with Carrell (1988, 104-105), who states that it is easy to read texts if readers have background knowledge of content. On

the other hand, Thai formal schema was used to compare the Thai and English grammar when students had limited background knowledge about texts as found with all the non-Thai texts. However, in the case of the Thai editorial text, Thai formal schema was useful because most students have little in depth knowledge of even Thai politics. They, therefore, could not rely on content schema.

For the result of the strategic use for all English proficiency groups, it appeared that skilled readers in the group used similar strategies as those in low and medium groups. This result is supported by the studies of Kletzien (1991, 67-86), Stavans and Oded (1933), and Anderson (1991) who found that unsuccessful readers used similar strategies to those used by the successful readers. Likewise, Vann and Abraham (1990) found that both unsuccessful and successful language learners used the same strategies and with similar frequency to complete the same comprehension tasks. Although skilled and unskilled readers in these studies as well as the present study used the same strategies and with similar frequency, they sometimes used strategies in different mechanical ways. For example, student S14N, a skilled reader, and S18R, an unskilled reader, used the same strategy S1 to find the answer for question 4 for the non-Thai context transactional text. S14N explained that she did not have background knowledge about Wellington, but she translated the key words "extreme south" in the text so she could find the answer by using these key words and she obtained a good score for this answer. For the unskilled reader S18R, she used the same strategy as the student S14N but she could not gain any score. She mentioned that she translated from Thai to English automatically word by word and then answered the question. This points out that even when skilled and unskilled readers use the same strategy, unskilled readers cannot be successful in translating from Thai to English because they may use different mechanical way of translating. Students sometimes used multiple strategies to answer a question. This is supported by Anderson's view (1991), skilled readers might know how to use strategies successfully and how to merge the use with other strategies even though they used the same strategies as unskilled readers. This also in line with Spiro (1979), skilled readers tend to change their mode of processing, whereas poor readers tend to rely on one processing. They, therefore, used multiple strategies to overcome the problems when they could not resort to one strategy.

In relation to the wider issue of language learning strategies, the strategies used by the students in the study are in line with cognitive and compensation strategies studied by Oxford (1990, 18-21) and cognitive and metacognitive strategies studied by O'Malley & Chamot (1990, 119-120). Although the strategies studied by Oxford and O'Malley & Chamot are instructed strategies, strategies in this study are uninstructed and unprompted ones, which were derived directly from student information about reading only, they can be compared as in Table 84.

Table 84 Language learning strategies

The Strategies of using Thai in this research	Oxford (Oxford, 1990)	O'Malley & Chamot (O'Malley & Chamot, 1990)
S1: to translate a word or a phrase itself	Cognitive Strategies C. Analysing and reasoning 4. Translating	Cognitive Strategies Translation
S2: to examine or think about the context of words or phrases or guess the meaning from context	Cognitive Strategies C. Analysing and reasoning 2. Analysing expressions	Cognitive Strategies Inferencing
S3: to understand the meaning of the sentence or find a reason	Cognitive Strategies C. Analysing and reasoning 1. Reasoning deductively	Cognitive Strategies Translation
S4: to confirm the reader understands about the sentence	-	Metacognitive Strategies Self-monitoring
S5: to compare the English with the Thai grammar by using formal schema	Cognitive Strategies C. Analysing and reasoning 5. Transferring	Cognitive Strategies Transfer
S6: to access or find the reader's ideas by using content schema	Cognitive Strategies C. Analysing and reasoning 5. Transferring	Cognitive Strategies Elaboration
S7: to construct or formulate ideas	-	Cognitive Strategies Recombination
S8: to summarise ideas	Cognitive Strategies D. Creating structure for input and output 2. Summarising	Cognitive Strategies Summarising
All strategies (S1 -S8)	Compensation Strategies A. Guessing intelligently 1. Using linguistic clues 2. Using other clues	-

Table 84 shows that the strategies used by the students in this study are concerned for the most part with cognitive strategies and to a small degree with metacognitive and compensation strategies (O'Malley & Chamot, 1990, 119-120; Oxford, 1990, 18-21).

In relation to the use of Thai, it helped students attain better scores, the result showing that the most useful strategy for all texts was S2- *to examine or think about the context of words or phrases or guess the meaning from context*. Other useful ones were S1- *to translate a word or a phrase itself*, S3- *to understand the meaning of the sentence or find a reason*, S5-*to use language transfer*, S6- *to use content schema*, S7- *to construct or formulate ideas*, and S8- *to summarise ideas*. Useful multiple strategies were the combinations of S5-*to use formal schema*, S6- *to use content schema*, S7- *to construct or formulate ideas*, and S8- *to summarise ideas* and other strategies. The few combinations, that show students using formal schema with S7 and S8 are of special interest, since they mean that L1 resources are used to derive meaning from larger portions of the text.

The result indicates S2- *to examine or think about the context of words or phrases or guess the meaning from context* which is one of bottom-up skills is the most important for reading L2 texts. Therefore, this study should lead to possible training for students in the use of strategies to assist reading comprehension in L2 as well as other useful strategies. When students are trained to use the useful strategies of using Thai to facilitate reading L2, they may enhance their ability in reading L2 texts because these strategies are useful even when they were not instructed strategies. The efficient ways to use these strategies should be supported by teachers. Students should be instructed how to examine the meaning from contexts, construct ideas, summarise ideas as well as activate content schema and formal schema before reading L2 texts. Moreover, the use of multiple strategies should be instructed since they may be more effective in assisting students to comprehend L2 texts (Baker, 2002, 77-95; Duke & Pearson, 2002, 205-242; Grabe, 2004, 53-55; Guthrie & Ozgungor, 2002, 275-288; Pearson & Duke, 2002, 247-258; Pressley, 2000, 545-561; 2002, 11-27).

9.2.2.2 Reading problems

Findings from research question 3, data analysis of questions 1-10 and a sentence from each text, point out that students had many problems when dealing with the reading texts. Problems were categorised into five areas, semantics, syntax, grammar, punctuation and comprehension technique.

Major problems from both sources are found with semantics that is word meanings and figurative language, and one aspect of syntax that is reference words.

Semantics

The first area where students had severe problems relates to semantics, or the study of meaning (Palmer, 1981, 1). This result is supported by the study of Segalowitz, Poulsen, & Komoda (1991), who found that even skilled bilinguals had reading problems at the level of word recognition and local ideas. Word recognition is a basic process in reading that links to the higher-order contextual factors in reading processes concerned with text comprehension (Besner & Humphreys, 1991, 2; DeZuniga, Humphreys, & Evett, 1991, 11). It also confirms Fountain and Nation's (2000, 30) view that vocabulary knowledge is the essential basis of language knowledge. Ellis also believes that adequate vocabulary development can help learners to understand the meaning of the discourse as it enables them to understand the working grammatical points are of the grammatical system (1997). Students, it was found, could not adequately deal with text comprehension because of the lack of word recognition skills. Furthermore, although sometimes they knew the meaning of a word, they could not understand the meaning found in the text. This is supported by Palmer's view (1981, 4), when he states that

"...the words do not mean what they might most obviously be taught to mean, that there is some other meaning besides the literal meaning of the words."

This results from multiple word meanings or 'polysemy' (Carter, 1987, 11), which causes added difficulty for the students.

Figurative language was another semantic problem. Sometimes the meaning of a word had been changed when it was used as a metaphor, an idiom, or there was a case of semantic extension. This problem appeared to be a major one that students in this study confronted. Research related to this was conducted by Littlemore (2001), who found that post-graduate overseas students misunderstood the main points of a lecture and could not

interpret the lecturer's views because they were unable to utilise the appropriate connotations of the metaphors. Cooper (1999) adds that when language learners encounter difficult metaphors, they might use several strategies to interpret the meanings. Ponterotto (1994, 2) points out that metaphors should be an important part of EFL curricula because they encompass the language of everyday interaction.

Another semantic problem was found with over reliance on content schema or background knowledge. This often led to miscomprehension, supporting the views of Steffensen, Joag-Dev, & Anderson (1979), Johnson (1982), and Carrell (1981), that over reliance on top-down processing resulted from schema interference and led to unsuccessful comprehension.

Syntax

The second problem area found in the present study was related to syntax. Lobeck (2000, 4) defines the meaning of syntax as:

“ the way in which words are ordered and grouped together, and how each group of words functions in a sentence as a syntactic phrase. Syntax also includes the rules or operations that can apply to words or groups of words.”

Reference words appear to be a major problem in this regard when students often misunderstood where the referent was. From the first paragraph of Wellington text (see appendix A, page 295), for example, student S01A answered that “*that*” in line 3 referred to “*Wellington*” instead of “*Port Nicholson*”. Problems with several conjunctions in a sentence were also a hindrance for the students, especially in complex sentences. As student S06F reported

‘There are many conjunctions “and” in a sentence so I could not find which one joined the main idea in a sentence.’ (see Thai editorial text in appendix A, page 301 paragraph 2, sentence 2.)

Nominalisation was another syntax problems as Lekawatana, Littell, Palmer, Scovel and Spenser (1968-1969) claim there are more patterns of nominalisation in English than in Thai. Therefore, Thais usually confront problems with complex nominalised forms in English. Ellipsis also hindered student comprehension. Related research about problems with ellipsis in science and technology textbooks in English and its implication for Thai students was conducted by Srestasathiern (2003, 3-4). She found that elliptical problems were the major reason for very low reading test scores, the omission of relative pronouns

being the most difficult type. Qualitative findings from the same thesis showed that most elliptical sentences caused difficulty in understanding textbooks. Srestasathien also attributed the problem to the differences between the two languages.

These syntax problems, reference words and nominalisation, all relate to cohesion which is a set of semantic and syntactic structures linking individual words in a text or sentences to each other (Irwin, 1986, 31). Cohesion refers to five types of relationships, that is, referential, substitution, ellipsis, conjunction, and lexical (Halliday & Hasan, 1976). If students cannot understand the cohesive devices found in a text, they cannot interpret the text. Mei-yun (1993, 12) suggests teachers to teach students how to use cohesive devices as signposts because they are textual markers which help students find key words for finding the meanings.

As mentioned, syntax is a primary means leads to the intended relation of words or group of words. Therefore, unskilled readers in this study tended to experience problems with the recognition of syntactic units when they dealt with more complex texts (Adam, 1980).

Grammar

The third problematic area relates to grammar. Major problems with tenses arose when students interacted with texts. Several tenses in English, such as the perfect tenses, variations of the future tense, and conditional forms are not found in Thai. Tenses in English seem to be very difficult for unskilled Thai students because they cannot always fit a normal analysis of time. As Declerck (1991, 391) claims

“...a tensed sentence expresses relations between some times, but not necessarily between all the times involved in the temporal structure.”

Other problems with subject / verb agreement, double / participial adjectives, parts of speech, word order, prefix / root, singular / plural, pronouns and possessive pronouns, passive voice, verbs after preposition / participle / gerund, “-ed form of verbs, and modals also occurred while examining interaction with the texts. These problems result from the differences between the Thai and the English languages as mentioned in contrastive analysis problems in chapter two (Brudhiprabha, 1968; Lekawatana, Littell, Palmer, Scovel & Spenser, 1968-1969). Hinkel (2002) also confirms that passive voice seems to be a difficult grammar point for L2 learners. In addition, some ideas about

teaching grammar are proposed by R. Ellis and Fotos. The former points to an approach to teach grammar that it should be focused on learners' *awareness* rather than *performance* (Ellis, 2002, 29). The latter proposes two types of structure-based interactive tasks to teach grammar (Fotos, 2002): first, structure-based tasks with an implicit focus on grammar, where students have to use target structure to complete the activities and second, structure-based tasks with an explicit focus on grammar or grammar consciousness raising task, where students have to solve grammar problems through the meaning-focused interaction in the texts. Therefore, grammatical points should not be neglected in relation to the promotion of reading comprehension for Thai students.

Punctuation

The fourth area, associated with problems the students confronted were punctuation markers such as the apostrophe "s", phrases in apposition or relative clauses with commas as well as extra information between two commas. Punctuation in English caused confusion because although punctuation in English is a meaning marker related to syntactic and grammatical structure, this is largely unrelated to the way punctuation is used in Thai. Furthermore, the apostrophe "s" is not used at all in Thai.

Answering technique

The last problematic area is associated with comprehension technique. When students answered questions in the tasks, they could not obtain better scores because they answered only part of the questions or quoted directly from texts instead of using their own words. This habit prevented students from attaining high scores even though in some cases they may have understood the texts. These problems arose with answering every task and may have been caused by unfamiliarity in answering open-ended questions by writing in their own words. This interpretation is backed by the finding that the problem was most prominent in the Thai transactional text because it was the first text which the students faced. In that event, they may not have been sufficiently accustomed to answering questions using their own words.

As mentioned, students confronted problems in several areas when dealing with texts. The resultant low scores can point to the need to consider student English proficiency related to reading comprehension. This aspect will be discussed in the next section.

9.2.3 The use of the first language

Findings from research questions 1.1, 1.2, 1.3 and 1.6 show the role that the first language plays in second language reading comprehension amongst these Thai undergraduates. Research question 1.1 reveals that approximately 84% students used only Thai or a mix of both Thai and English to facilitate their comprehension on reading L2 texts with a clear majority opting for the former. From research question 1.6, similarly high percentages of using translation from English into Thai and thinking in Thai at 90% and 85% respectively were obtained. Therefore, these sources point to the fact that Thai emerges as the major language of thought in this study.

These findings are supported by Cook (1992, 557-591), who stated that all L2 learners use their L1 while dealing with the L2. These learners he claims cannot switch off the use of their L1 but use it continually. Kern (1994, 441-461) in his study about mental translation while reading L2 texts, found that the students usually used mental translation from L1 to their L2. The many studies of Upton (1993, 1-2; 1997, 1-27; 1998, 5-20), Upton & Lee-Thompson (2001, 469-495) and Cohen (1995, 99-113), also found that L2 readers rely on their L1 as a language of thought while reading L2 texts. Moreover, studies where students are engaged in others of the macro-skills have also led to similar findings (Anton & DiCamilla, 1998, 314-342; Behan, Turnbull, & Spek, 1997, 41-42; Bernhardt & Kamil, 1995, 15-34; Blanco-Iglesias, Broner, & Tarone, 1995, 239-251; Brooks, 1996, 121-130; Brooks & Donato, 1994, 262-274; Cohen, 1994b, 171-195; Cumming, 1989, 81-141; Cummins, 1993, 51-70; Friedlander, 1990, 109-125; Hall, 1990, 43-60; Jiang & Kuehn, 2001, 1-23; Jones & Tetroe, 1987, 34-57; Kobayashi & Rinnert, 1992, 183-215; Lay, 1988, 15-18; Paivio & Lambert, 1981, 532-539; Swain, 1995, 125-144; 2000, 97-114; Swain & Lapkin, 1998, 320-327; 2000, 251-274; Villamil & Guerrero, 1996, 51-75).

When looking at the use of Thai in relation to genres and text types, the results show that the students used Thai most frequently with the Thai transactional text and the

next most frequent use of Thai was associated with both narrative experiential texts. For the other texts the use of Thai was mentioned around once or slightly higher for each question in both editorial texts and the non-Thai transactional text. Moreover, the use of Thai was examined relating to question types with top-down and bottom-up. The findings also show that the use of Thai was used somewhat inconsistently. It was used more often for top-down questions for both transactional texts and the Thai narrative experiential text whereas it was used more frequently for bottom-up questions for both editorial texts and the non-Thai narrative text. The lack of consistency of the use of Thai for these genres, text types and question types may have several causes, such as difficulties of grammatical structure and vocabulary of particular texts, and the demands of the questions as well as students' background knowledge and language transfer.

The use of the first language in second language activities can also be connected to the stage of learning. Students use their L1 to assist their L2 activities according to their language levels. As Ringbom (1987, 58) states L1 is most important to L2 learning during the early stages of learning. This view is supported by the studies of Kern (1994, 441-461), Upton (1993, 1-2; 1997, 1-27; 1998, 5-20) and Upton & Lee-Thompson (2001, 469-495), who found that the lower proficiency learners tended to use their L1 in L2 reading more often than the higher levels. Likewise, the students in this study whose English proficiency could be estimated at intermediate and lower levels opted to use their first language as the language of thought.

In relation whether or not positive effects resulted from the use of Thai in reading comprehension, the results show that 79% of students thought that Thai greatly helped their comprehension of English when reading. Thinking in the L1 did not only apparently assist L2 reading comprehension, but also helped when learners dealt with other activities or wanted to solve their L2 problems (Cohen, 1994b, 171-195; Saville-Troike, 1988, 567-590). Behan, Turnbull, & Spek (1997, 41) confirmed that the use of L1 can both support and enhance L2 development. In terms of SLA, Ellis (1985, 40) added that L2 learners could use their L1 knowledge to help them perform in the L2. The results from this study reveal that, according to the students, Thai helped most with the meaning of words, phrases, sentences and main ideas. Translation into Thai also show that Thai provided assistance with word meanings and finding main ideas and details, sentence meanings, grammatical and structures. These results partly confirm Cook's premise

(Cook, 1999, 201-202), that second language learners use their L1 in a classroom in two ways, for finding meaning of a new word or grammatical structure and for communication while doing classroom activities. By contrast, Krashen (1981, 64) claimed that the first language influenced errors in L2 performance. Hammerly (1991, 111) agreed with Krashen that in some cases the first language interfered with language learning rather than assisted. Therefore, it must be taken into account that the use of the first language in performing L2 activities, especially for L2 reading comprehension, can have both positive and negative effects. Evidence obtained from this study would lead to the suggestion that it has more positive effects than negative ones, though this empirical evidence from research into the connection between conclusions reached and strategies used.

In terms of affective factors in relation to the use of Thai while reading, a majority of the students believed that the use of Thai helped them understand the texts. Most of the remainder were even more positive, indicating that thinking in Thai while reading made them feel happy with a few stating that it made them feel confident. As further support for this, the results also show that a majority of the students felt uncomfortable when they had to think only in English and could not use Thai. In this case too a remainder gave more extreme views. Some reported that it was difficult for them to deal with texts without using Thai while a few admitted to feeling unsure. This accords with Cohen's view, that multilinguals should use the first language or other languages for their language of thought in accordance with what makes them feel comfortable (Cohen, 1995, 101).

On the other hand, students were unsure about the ultimate value of using Thai. The awareness of a need to use more of English while reading was mentioned by the majority of the students whereas only a few of them rejected the ideas to do so because they considered it unnecessary for the thinking process. Nearly half of the former gave the reasons that they could improve their reading skills by thinking in English, about a third thought that they could read and understand texts quickly and a few of them thought that they could find answers quickly by thinking in English. This point of view conforms to some methods of foreign language teaching such as Total Physical Response, the Silent Way, and the Natural Approach as well as the assumptions underlying CLT. These methods rely on an intuitively based assumption that it is beneficial for L2 learners to

think as much as possible through their target language (Cohen, 1995, 104; 1998, 157). Kobayashi & Rinnert (1992, 204-205), also agree with this assumption that L2 performance may be inhibited from too much dependency on their L1 and overuse of translation may prevent and delay L2 learners to develop their L2.

From the study, it appears that the L2 readers obtained some benefit from thinking in their first language when interacting with the reading texts. This finding supports Krashen's comprehension hypothesis (Krashen 2002, 395-404; 2004, 1-16). L1 can facilitate comprehension in the L2 when it is used to make input more comprehensible. Thus, teachers should not discourage students from using their L1. They should be supported to use code switching from their L1 to the L2 whenever they need to do so at least in the early stages of EFL learning. As Cook (1999, 185) suggested language teachers should consider L2 students as "multicompetent users" rather than as "failed native speakers" because the knowledge of their L1 is different from L2 of the native speakers. Students should not be prohibited to use their L1 when dealing with L2 texts. On the contrary, they should be encouraged to follow Cummins' advice to use their L1 to assist the development of the L2 (Cummins, 1981, 3-49; 1993, 51-70).

9.3 Conclusion

This chapter reports the findings as well as discusses the findings found in the study. The findings are derived from the analysis of the answers and the introspection from reading comprehension tasks as well as from the interviews and the questionnaire. The findings are reported in relation to answer all research questions, that is, the use of Thai in reading comprehension, assistance gained from the use of Thai and reading problems.

In the discussion, three issues relating to the findings were raised. The first issue considered is the use of the first language, the second student reaction to materials concerned with texts and genres and the third student reading processes concerned with the use of strategies, reading problems, and the relationship between student English proficiency and reading comprehension skills.

The next chapter will report a summary of the findings and relate them to the theoretical framework from chapter two. Implications for teachers, suggestions for further study and limitations of the study will also be discussed in the next chapter.

CHAPTER TEN

CONCLUSION, IMPLICATIONS AND SUGGESTIONS

This study has investigated the use of the first language in reading English comprehension, assistance gained from the use of Thai and problems which students experienced when reading English texts. In this chapter, the findings from the previous chapters will be summarised by connecting the findings to the conceptual framework. Implications for the teaching of English reading comprehension for Thai undergraduates and suggestions for further research will also be included.

10.1 Findings and the theoretical framework

The theoretical framework, described earlier in this study was developed by the researcher from the readings discussed in the literature review. Since findings of the study explained in the previous chapter relate to major parts of this framework, they provide insights into what these Thai EFL readers do when reading unaided. In this section, those findings will be summarised in ways that will extend the understanding of several important aspects of the same framework.

In relation to this, three main issues, that is texts and comprehensible input, decoding processes, and the use of the first language, will be discussed and summarised. Although these issues will be discussed separately, it needs to be kept in mind that all three relate to one another and should not be seen as completely separate.

10.1.1 Texts and comprehensible input

Written texts were the main input for the reading processes of the students in this study and responses to those texts by the students help to highlight what constitutes suitable comprehensible input, one of the first sections in the framework. As Krashen's input and comprehension hypothesis suggests (Krashen 1985, 3-4; 2002, 395-404; 2004, 1-16), readers comprehend L2 texts by joining their previous input with new input and trying to understand the meaning of the current texts. Thus, the main findings relating to student responses to text content, genre type and text level, may lead to guidance about text selection.

Firstly, culturally familiar texts may provide valuable input for EFL readers since the students obtained significantly better scores with two out of three pairs of culturally familiar and unfamiliar texts. Although, preferences for the culturally familiar texts when related to scores were not statistically significant, most students mentioned that they preferred them over the culturally unfamiliar texts. Leaving aside scores then, this implies that these texts can motivate students to make greater efforts. Therefore, for more effective input, this study suggests that texts with a familiar background should be at least included in any reading course. It is in fact strange that, though this principle is adopted in most first reading programs, it is rarely applied in second language programs.

Secondly, only three genres were used in this study, but the students had the most positive response to the narrative experiential texts. The results from the questionnaire also support that this genre was the most accessible one. Hence, there might be greater usage of narrative experiential texts of any background in EFL reading courses.

However, suggestions such as these about text content and genre type are not enough to guarantee that input is comprehensible. What the study indicates also is that the level of text must also be an important deciding factor for the selection of texts. In this study as determined by scores, the texts especially for unaided work were shown to be too difficult. When students interact with texts at their appropriate language proficiency level, they will make good use of such strategies as *to examine or think about the context of words or phrases or guess the meaning from context* and *to understand the meaning of sentence or find a reason*. However, in this case, only some were able to utilise these strategies effectively. Furthermore, the students had major problems with bottom-up problems, such as word meanings, figurative language and tense as well as top-down matters such as reference words. If, on the other hand, the texts had been simpler, students would be able to solve problems through the use of the same strategies and thus compensate for the many deficiencies at this level.

Therefore, the study has provided further understanding of how readings in the Thai EFL situation could be made more comprehensible, that is, by careful attention to language level, as well as text content and genre type.

10.1.2 Reading processes

Reading processes are concerned directly with processes of decoding but also draw upon schema, another part of the framework. When decoding, readers try to acquire meanings from texts at four levels, that is, grammar, information, discourse and writer intent (Cohen, 1990, 77-80). Reading in L2 is different from in L1, because readers encounter problems which may not be applicable in the case of the native speaker. Therefore, evidence about strategy usage and problems from the study is used to highlight aspects of the framework relating to reading processes. Some reflection on another part of the framework, the operation of formal schema, is also included.

10.1.2.1 The use of strategies

In order to overcome problems encountered in L2 reading, all students made a similar use of Thai to implement the unprompted strategies when decoding the L2 texts. The fact that no relationship was noticed between the three student levels and the frequency of strategy use suggests that successful comprehension depends on far more than strategy use. In this case, for example, the differences in scores would have been influenced by variations in Thai and English schema.

Amongst the individual strategies, the foremost one used was S2 - *to examine or think about the context of words or phrases or guess the meaning from context*. Other leading strategies were S3-*the use of Thai to understand the meaning of the sentence or find a reason* and S1-*the use of Thai to translate the word or phrase itself*. Connection between scores and strategies, however, revealed a slightly different order of strategies, the most useful strategies being S2, S1 and S3. The most useful multiple strategies were the combinations of S5-*to use Thai formal schema*, S6-*to use content schema*, S7-*to construct or formulate ideas*, and S8-*to summarise ideas* with others. Thus, the usefulness of these strategies may guide those who have an interest in training students in the use of strategies.

The second finding is the students used more bottom-up strategies (S1-S4) than top-down strategies (S5-S8) with both question types, top-down and bottom-up. This finding supports Chadavimol's view that Thai students in the early and intermediate

stages tend to use bottom-up skills in reading in translating word-by-word (Chandavimol, 1998, 31-42). It also tends to indicate that the language level of the texts was too high.

Thirdly, the study found that the use of content schema was more prominent for the Thai context texts, whereas the use of Thai formal schema was more prominent for the non-Thai context texts as well as the Thai editorial texts. When students decode the meanings of texts related to culturally familiar texts, they may make use of content schema, but when they cannot make use of content schema even with a culturally familiar text, they may try to use Thai formal schema. However, since Thai and English are very different languages, this may not always be productive.

10.1.2.2 Reading problems arising when decoding

When the students were involved in the processes of decoding, they experienced difficulties in comprehending the texts. Five main issues relating to reading problems emerged for the study, that is, semantics, syntax, grammar, punctuation and answering techniques, in relation to the processes of decoding are discussed in order of severity.

Firstly, this study gives strength to the argument that semantics is the major area which causes difficulties in comprehending the texts when decoding. Most students showed their weaknesses with word meanings and figurative language in the texts. Thus, this finding may encourage teachers and students to enhance students' knowledge about vocabulary and figurative language.

Secondly, the students in this study also had problems with syntax. When students encountered difficulties with syntax, the processes of decoding were interrupted. In this study, reference words appear to be a severe problem for students. Other important syntactic problems were those with conjunctions, ellipsis and nominalisation. This evidence may lead to the consideration of activating enquiry about these syntactic areas at some points in the reading process.

Thirdly, analysis shows that students in the study experienced problems in the grammatical area, especially with verbs and may help explain why processes of decoding in this study were not effective. Hence, this indication may lead to more emphasis being given to grammatical points for Thai EFL undergraduates prior to or during decoding academic texts.

Fourthly, when students were decoding the meaning of texts, lack of knowledge about punctuation hindered understanding of larger sections of the text for some.

Finally, although the students may have possessed sufficient linguistic knowledge, they did not score well because of deficient answering techniques, that is, the giving of partial answers and quoting directly from the texts. Such failures could be attributed either to lack of proficiency and/or experience with open-ended questions.

Therefore, the study has guided evidence for understanding difficulties in the processes of decoding in order to assist teachers to activate appropriate knowledge for these students before reading. This evidence may also be useful for other tertiary students.

10.1.3 The use of the first language

When students interacted with English texts, in this case, all of them mentioned using Thai to assist their comprehension. Discussion concerning the use of Thai, which is included in 1.1/1.2 proficiency and usage at the top of the framework, will cover four issues namely, the use by all students of their L1, positive and negative effects of this use, the areas where Thai helps the understanding, and affective factors, when the students used Thai.

Firstly, all students mentioned using Thai when reading English texts. They usually thought in Thai and translated from English into Thai in order to comprehend the texts. This finding is supported by many research studies such as Kern (1994, 441-461), Upton (1993, 1-2; 1997, 1-27; 1998, 5-20) and Upton and Lee-Thompson (2001, 469-495). Unlike many of these studies, no difference was found between the levels, because the students belonged to the same cohort.

Secondly, the benefits were variable as with the use of strategies. There were both positive and negative effects. Although some students could gain benefit from the use of Thai by obtaining better scores, the use of Thai did not guarantee the gaining or the loss of marks.

Thirdly, suggestions from the questionnaire indicate that the use of Thai helped the students in this study most with the meaning of words, phrases and sentences, main ideas and details, and grammar and structures. Another important suggestion from the

questionnaire stems from the admission by most students that the use of Thai made them feel happy and confident, when thinking in Thai while reading. On the other hand, a few students rejected the idea of using Thai. They mentioned that it was not necessary for the reading processes, and that thinking in English could improve their reading skills

These findings about the extent and variable effects of the use of Thai may lead to finding more appropriate ways to use L1 and L2 in thinking processes while reading L2 texts.

10.2 Limitations

This study had limitations with data collection and sources of data. The first point is concerned with data collection. Since the gathering of data had to be done at weekends this meant that only one whole section of the data could be obtained on one weekend. These days had also been chosen to limit contamination through participant communication, because each student could go straight back home after completing the task and interviews. Moreover, between the reading and the interview, there was a short time gap. Therefore, students might not be able to remember accurately how and in what language they obtained their answers.

The second point is concerned with sources of data. Although the number of subjects, twenty, was quite small, the study's qualitative nature, whereby students were interviewed in some depth, means that it should provide useful evidence.

Perhaps the most important point affecting some comparisons in the data is that difficulties arose when finding parallel texts for each task. The researcher tried to use authentic materials with the same genre for each pair of texts which are culturally familiar and unfamiliar texts. For each pair of texts, every effort was made to ensure that they were similar in topic, length, and difficulty of structure. However, no readability checks were carried out for the reason that genre and context were the determining factors in selection.

10.3 Pedagogical implications

The findings from this research indicate that the Thai language was crucially involved in the processes of English reading comprehension. These findings can lead to

implications for teaching and learning English reading comprehension for EFL students at tertiary level and others in Thailand. The account of pedagogical implications in relation to texts, processes and the use of L1 take the form of recommendations, followed by a brief discussion for each one.

10.3.1 Texts

In teaching students to read English, the selection of texts is of vital importance. Therefore, those selecting texts for EFL students in Thailand may have to pay closer attention to comprehensible input. Text selection should also respond to the students' needs and interest about texts.

Recommendation 1: Culturally familiar texts may be more suitable than culturally unfamiliar texts for the students in English courses at any level to study.

This is because they support schema theory which points out that prior knowledge can assist reading L2 texts (Chan, 2003, 60-69; Johnson, 1982, 503-516). Therefore, teachers should provide students with access to at least some culturally familiar texts in order to make connection with the real world easier. Humanistic and local texts, for example, may lead students to think, feel and achieve more when reading (Tomlinson, 2001, 1). However, students at tertiary levels should also have the opportunity to use a mixture of texts or glocal texts (Robertson, 1995, 25-44), because both local and global texts are needed to provide a more varied experience of reading.

Recommendation 2: Narrative experiential texts appear to be the most accessible texts as determined by both the scores and the questionnaire.

In any one course the order of genres needs to be carefully considered and narratives might be best introduced early in the course to give encouragement to students. The belief, too, that extracts from encyclopedias are easy to understand perhaps needs some reconsideration.

Recommendation 3: Text selection should also take into account the actual language proficiency of the students.

Major determinants of the level of texts such as vocabulary, idioms/metaphors, grammar and sentence length should be taken into consideration and as far as possible matched to student English proficiency. This might mean that teachers need to use some

methods for checking readability levels, such as cloze or pre-viewing with a mid-level student.

10.3.2 Reading processes

The implications relating to reading processes are discussed in relation to the use of strategies and reading problems.

10.3.2.1 The use of strategies

The nature of strategy usage in playing an important role to facilitate reading comprehension in this study has two main pedagogical implications for teachers.

Recommendation 1: Teachers should support students to make use of strategies to facilitate English reading.

In order to use strategies effectively, teachers may train students to utilise the useful strategies such as those from this study such as S2, S1 and S3 and the combinations of S5, S6, S7 and S8. S2- *to examine or think about the context of words or phrases or guess the meaning from context* may be emphasised when training to use strategy because it appears to be the most useful strategy in the study. It may help students at least for the early stages because when students become more successful readers, they will rely on more top-down processing (Clarke, 1980, 203-209). Teachers may suggest to students that they use multiple instead of single strategies (Baker, 2002, 77-95; Duke & Pearson, 2002, 205-242; Pressley, 2000, 545-561; 2002, 11-27). Moreover, recent strategy research suggests that a generalised form of strategy instruction rather than the introduction of individual strategy usage may bring the best results (Grabe, 2004, 53-55; Guthrie & Ozgungor, 2002, 275-288).

Recommendation 2: Teachers should routinely activate the use of schema in relation to the texts before and during reading.

In order to help students compensate for their lack of lower level knowledge, teachers may activate knowledge about content schema and formal schema in relation to the texts before reading. They should also make students aware of the interactive theory, whereby effective top-down processing can compensate for deficiencies at lower level and effective bottom-up processing can compensate for the lack of higher level

knowledge in language (Anderson, 1999, 2-3; Grabe, 1991, 378; Hudson, 1982, 1-31; Ringbom, 1992, 101; Stanovich, 1980, 63). Therefore, students should be guided to use their top-down skills or bottom-up skills to compensate for the lack of the other by means of guided questioning and focused tasks.

10.3.2.2 Reading Problems

The evidence of reading problems arising when decoding in this study leads to five recommendations for teachers to assist EFL students overcome these problems.

Recommendation 1: Increased attention to L2 vocabulary and figurative language is necessary for growth in L2 reading comprehension.

Since word meanings and figurative language were major problems for reading in this case, teachers should help students enhance the knowledge about these. This finding supports Fountain and Nation's view (Fountain & Nation, 2000, 30) that vocabulary is an important basic knowledge of language. Teachers may help students by using this guideline. Firstly, teachers teach vocabulary explicitly as Nation (1995, 5-7) suggests teaching the most frequent 2,000 words for language as shown in his list. Secondly, teachers can pre-teach vocabulary before reading, give glosses for low-frequency words in texts, review words met in previous texts as well as encourage students to overlook some unknown words (Nation, 1990, 1-187). Thirdly, teachers should train students to guess the meaning of words from context by using clues in the text (Nation & Coady, 1988, 97-110, Schmitt, 2000, 142-158). Fourthly, teachers should encourage students to enrich their vocabulary through extensive reading (Coady, 1997, 225-237). Lastly, teachers might be able to introduce students to use Computer-Aided Language Learning (CALL) provided by Oxford University Press (*Oxford Interactive Word Magic*, 1998) to increase their knowledge of vocabulary. These suggestions may be useful to enhance the range of known vocabulary for Thai students.

Furthermore, teachers need to help students to comprehend figurative language. Firstly, teachers should ask students to think of equivalent metaphors in their L1, use literal meanings to remember metaphors in the L2 and use contexts to understand metaphors (Littlemore, 2001, 333-349). Secondly, teachers provide questions based on metaphors so that students are challenged to decode meanings (Ponterotto, 1994, 2). In addition, other options for teaching figurative language were proposed by McGowan

(2002, 15-19), who used the Systemic Coder software package WAG (Workbench Analysis Generation) by Mick O'Donnell (1995, revised 2001) to analyse the level of complexity of figurative language in the Australian media. After the workshop, students could unpack some complex metaphors using possible literal meanings and then transferring those meanings to the context. These suggestions may be adapted for use in Thai classrooms to help students overcome their difficulties.

Recommendation 2: Knowledge about such syntactic problems as reference words, conjunction, ellipsis and nominalisation is necessary for successful L2 comprehension.

In order to help students comprehend texts, teachers should activate knowledge about the syntactic problems, found in this study to be causing problems. These were reference words, conjunction, ellipsis and nominalisation. These aspects of syntax are often referred to as cohesion or that which links individual words in a text or sentences to each other (Irwin, 1986, 31). Mei-yun (1993, 12) suggests teachers teach students how to use cohesive devices as signposts, because they are textual markers which help students find key words for finding the meanings.

Recommendation 3: Knowledge about certain grammatical areas as the form of the verb, parts of speech and word order is necessary for L2 reading.

The finding indicates that grammar is an important area of difficulty for students in this case, especially with verbs, as well as parts of speech and word order. Therefore, teachers should emphasise it when teaching reading in order to help students comprehend texts. Firstly, Fotos (2002, 143-150) proposes two types of structure-based interactive, that is, an implicit focus on grammar which students have to use target structure to complete the activities and an explicit focus on grammar or grammar consciousness raising task which students have to solve grammar problems through the meaning-focused interaction in the texts. Secondly, Ellis (2002, 29) suggests five kinds of activities for learning grammar, that is, listen to comprehend the texts, listen to notice the structure of the texts, understand the grammar points of the texts, check other texts containing grammar errors, and try out their understanding of the target structure in a short production activity.

Recommendation 4: Knowledge about punctuation can help L2 reading.

In order to help students decode texts easily, punctuation markers such as the apostrophe “s”, and commas with phrases in apposition or relative clauses as well as extra information between two commas should be taught as part of the reading program. Punctuation in English is a meaning marker related to syntactic and grammatical structure and it is largely different from the way punctuation is used in Thai. Therefore, teachers should not ignore how punctuation markers are guides to the interpretation of meaning.

Recommendation 5: Knowledge about answering techniques can provide practice in thinking by paraphrasing and help obtain better scores in reading.

The finding points out that answering techniques were important matters for gaining better scores. Some students in this case should attain better scores but they did not because they answered only part of the questions and sometimes quoted directly from texts. Therefore, teachers should guide students before involving them in such reading tasks as to how to write their answers for open-ended questions.

10.3.3 The use of the first language

The finding from this study that students were using their L1 extensively to assist their thinking leads to an important dilemma for teachers. This is the question as to whether or not teachers should promote the use of L1 instead of L2.

Recommendation 1: The use of L1 should not be discouraged in early reading courses.

From the study, the students obtained some benefit from thinking in Thai when interacting with the English reading texts. Teachers, therefore, should not discourage students from thinking in Thai. They should be supported to use code switching from English to Thai when they need as Cook (1999, 185) suggests that language teachers should consider L2 students as “multicompetent users” rather than as “failed native speakers”, because the knowledge of their L1 is different from the L2 of the native speakers. The use of L1 in the processes of teaching and learning English reading can be utilised as Cook (1999, 204) states

“Together with the change in attitude, placing more emphasis on the successful L2 user and on using the L1 more in teaching can bring language teaching to the realisation that it is helping people use L2s, not imitate native speakers.”

Thus, language teaching can utilise students' L1 together with the L2, most particularly in the case of older students, who already possess a strong grounding in L1 literacy.

Recommendation 2: The use of L2 should be promoted in higher reading courses.

When students move to higher level English reading courses, teachers may encourage them to use more English in their thinking processes. CLT, a widely supported teaching approach in Thailand relies on an intuitively based assumption, that it is beneficial for L2 readers to think and talk as much as possible in L2 (Cohen, 1995, 104; 1998, 157). Kobayashi & Rinnert (1992, 204-205), also agree with this assumption that L2 performance may be inhibited from too much dependency on their L1 and overuse of translation may prevent and delay L2 learners to develop their L2. Thus, the use of the L2 as a language of thought while reading L2 texts should be promoted in order to improve students' reading skills.

However, students cannot really begin to think in the L2 unless they can understand the meaning of the texts. In this case, the mental resources of the students such as the knowledge of content lexis and grammar did not allow them the opportunity to think in English.

10.4 Suggestions for further study

The present study focused on intermediate students using strategies when reading English texts, but did not investigate the strategies used for the beginning and advanced students in Thailand. Therefore, further study can extend the study to all levels, the beginning, intermediate and advanced levels. On the other hand, instructed strategies as trained strategies can be investigated. From the work in this study, the useful strategies can be included for the training course to assist English reading comprehension for Thai students at all levels. The next study can deeply investigate the different ways, skilled and unskilled readers use when resorting to the same strategies. Furthermore, studies could investigate what methods could be adopted to encourage the successful use of L2 in reading.

This study examines three different genres of texts, that is, transactional, editorial and narrative experiential texts. Further study can gather data from other interesting source as shown in the study that is those from magazines.

As the study reveals that the use of formal schema was more prominent than content schema in reading this set of texts, this aspect should be studied deeply to examine how and why both these strategies are used to facilitate L2 reading comprehension.

For culturally familiar and unfamiliar texts in the case of transactional texts, the study reveals that students performed better scores for culturally unfamiliar text than the culturally familiar text. Further study should examine the factors which affect students' understandings for both text types, as well as differences between the benefit of using local materials and global materials.

10.5 Summary

This chapter relates the findings to the theoretical framework in chapter 2 and reminds readers of the limitations of the study. Pedagogical implications for teachers, and suggestions for further study are also discussed.

The findings in this study extend understanding of the theoretical framework as applied to these Thai undergraduates students in three main areas, text and comprehensible input, decoding processes including the use of strategies and reading problems arising when decoding, and the use of the first language. In saying this researcher makes no claim that these findings give a complete picture of Thai undergraduates whilst reading in English. The research process involved here has been much like looking at the back of a tapestry, where many different threads can be traced. However, true understanding of the reading process needs a thorough investigation of how these threads come together in the mind of the reader. Although this study has examined some of the different threads relating to second language reading, the evidence presented is far short of explaining how the entire process illustrated in the framework fits together.

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APPENDICES

Appendix A

Reading Comprehension Tasks

Name.....Number.....Class.....

Date.....

Reading Comprehension Task 1

Directions

1. There are two parts in this task and each part consists of one text.
2. You will read the texts. Each one is followed by a number of open-ended questions about it. You are to write down the answers and explain how you get the answers.
3. At the end of each part you are to write down the difficulties you get from the providing sentence.

Part 1,

Bangkok, Krung Thep, city, capital, and chief port of Thailand. As the only cosmopolitan city in a country of a small towns and villages, it is Thailand's cultural and commercial centre.

Bangkok is located on the Chao Phraya River, about 25 miles (40 km) from the Gulf of Thailand. In 1971 the original city merged with the former municipality of Thon Buri on the west bank of the Chao Phraya, and in 1972 the unified city was merged with other outlying areas to form a single city-province, Krung Thep Mahanakhon (Bangkok Metropolitan City).

The city's economy is centred on its port, which handles nearly all of the country's exports and imports, and on its commerce and industry. Principal industries include food processing and the production of textile and building materials. Bangkok houses a majority of the country's bank deposits and also is the base for several insurance firms.

(Source: The New Encyclopedia, Britannica, 1994, 15th edition, Volume 1, page 886)

Questions ; Write down the answers in English or Thai and explain how you got the answers.

1. According to the passage, how did Bangkok become Krung Thep Mahanakhon or Bangkok Metropolitan City?

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How did you get the answer? (In Thai)

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2. Why is Bangkok the commercial centre of the country?

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How did you get your answer? (In Thai)

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3. According to the passage, where is Bangkok?

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How did you get the answer? (In Thai)

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4. What is the meaning of *the original city* in line 5?

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How did you get the answer? (In Thai)

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5. What is the meaning of *the unified city* in line 6?

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How did you get the answer? (In Thai)

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6. What is the meaning of *other outlying areas* in line 7?

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How did you get the answer? (In Thai)

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7. What does the word *handles* in line 9 mean?

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How did you get the answer? (In Thai)

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8. What does the word *houses* in line 12 mean?

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How did you get the answer? (In Thai)

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.....
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.....

9. The word *it* in line 2 refers to.....

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How did you get the answer? (In Thai)

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10. The word *which* in line 9 refers to.....

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How did you get the answer? (In Thai)

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Explain in Thai: Write down in Thai what you think this sentence means. What difficulties do you have with understanding it? Why?

The city's economy is centred on its port, which handles nearly all of the country's exports and imports, and on its commerce and industry.

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Part 2

Wellington, capital city, port, and chief commercial centre of New Zealand is situated in the extreme south of the North Island. It lies on the shores and hills surrounding Port Nicholson, an almost landlocked bay that is ranked among the world's finest harbours. Mount Victoria rises 643 feet (196 m) near the centre of the city.

In 1826 two British vessels landed a working party on the site to collect flax and timber. In 1839 a ship belonging to New Zealand Company arrived with officials who were to select a site for the company's first settlement. The site chosen, at the mouth of the Hutt River, proved unsuitable, and a move was made to Lambton Harbour on the west shore. The settlement was named in 1840 in recognition of the aid given the company by the 1st Duke of Wellington. In 1865 the seat of the central government was transferred there from Auckland. The city is part of the Wellington local government region. The city's international airport is also the focal point of the country's internal aviation network.

(Source: The New Encyclopedia, Britannica, 1994, 15th edition, Volume 12, page 572)

Questions : Write down the answers in English or Thai and explain how you got the answers.

1. What is the location of Wellington?

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How did you get the answer? (In Thai)

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2. According to the passage, what had happened to Wellington between 1826-1865?

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How did you get the answer? (In Thai)

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3. Why was the city named Wellington?

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How did you get the answer? (In Thai)

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4. What is the meaning of *extreme south of the North Island* in line 2?

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How did you get the answer? (In Thai)

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5. What is the meaning of the *focal point* in line 12?

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.....

How did you get the answer? (In Thai)

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6. What is the meaning of the underlined part of the word international?

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How did you get the answer? (In Thai)

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7. What does the word *landlocked* in line 3 mean?

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How did you get the answer? (In Thai)

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8. The word *that* in line 3 refers to.....

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.....

How did you get the answer? (In Thai)

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9. The word *there* in line 11 refers to.....

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How did you get the answer? (In Thai)

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10. The word *the city* in line 11 refers to.....

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How did you get the answer? (In Thai)

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Explain in Thai: Write down in Thai what you think this sentence means. What difficulties do you have with understanding it? Why?

The site chosen, at the mouth of the Hutt River, proved unsuitable, and a move was made to Lambton Harbour on the west shore.

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Name.....Number.....Class.....

Date.....

Reading Comprehension Task 2

Directions

1. There are two parts in this task and each part consists of one text.
2. You will read the texts. Each one is followed by a number of open-ended questions about it. You are to write down the answers and explain how you get the answers.
3. At the end of each part you are to write down the difficulties you get from the providing sentence.

Part 1.

Prime Minister Thaksin Shinawatra has completed his trips to Laos, Cambodia and Burma, which have taken place over the past 10 days, interrupted by his Constitution Court appearance, of course. Despite his previous, in fact rather limited, experience as a foreign minister, the trips must have offered him some salutary lessons in diplomacy, especially that procedures cannot be rushed or, if he had so wanted, achieved in a crisp, decisive CEO style. Quick results can never be achieved given this region's delicate brand of politics. Nevertheless, the trips were not in vain.

Thaksin's sojourn to Laos and Cambodia have strengthened bilateral ties that have had a rough time of late. Nothing, of course, can mend broken fences and restore relations like a high-level visit, especially when it involves a new leader who is anxious to build up his regional stature and show he is progressive and open-minded. Laos offers the perfect example for this: having the Thai leader pay a visit is an "insurance policy" showing that this landlocked neighbour will not be bullied, and that cooperation, especially in the economic field and the hydroelectricity industry, is very necessary. Laos' leaders know full well that a new Thai leader wants to gain quick kudos by visiting them and getting involved in a little chummy *ram-wong* (traditional Thai dance).

(Source: The Nation: Thursday, June 21, 2001, p.4A)

Questions : Write down the answers in English or Thai and explain how you got the answers.

1. According to the passage, why did Prime Minister Thaksin Shinawatra make trips to Laos and Cambodia?

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How did you get the answer? (In Thai)

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2.How did Laos accept the visit of Thai Prime Minister?

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How did you get the answer? (In Thai)

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3.What is the meaning of *mend broken fences* in line 9?

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How did you get the answer? (In Thai)

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4.What is the meaning of *open-minded* in line 11?

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How did you get the answer? (In Thai)

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5. What is the meaning of *in a crisp* in line 6?

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How did you get the answer? (In Thai)

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6. What is the meaning of the underlined part of the word hydroelectricity in line 14?

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How did you get the answer? (In Thai)

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7. In what two areas would Laos like to cooperate with Thailand?

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How did you get the answer? (In Thai)

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8. What do you think the adjective *chummy* in line 16 means?

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How did you get the answer? (In Thai)

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9. The word *which* in line 2 refers to

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How did you get the answer? (In Thai)

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10. The word *them* in line 16 refers to

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How did you get the answer? (In Thai)

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Explain in Thai: Write down in Thai what you think this sentence means.
What difficulties do you have with understanding it? Why?

Nothing, of course, can mend broken fences and restore relations like a high-level visit, especially when it involves a new leader who is anxious to build up his regional stature and show he is progressive and open-minded.

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Part 2

The polls once again showed that the Iranian voters prefer reform to anything. The overwhelming turnout and the weight of the votes cast yesterday for the second term of President Mohammad Khatami serves as a good lesson to outsiders who think that Iran cannot sustain its economic-reform programme and political openness under the current Islamic system. Khatami has done quite a remarkable job over the past four years considering that the country is controlled by hard-line clerics.

He should have done more to protect civil liberty, but then again, in doing so he could have lost his entire reform platform altogether.

Some would say that he is not the real mover and shaker in Iran as he is "minute" in comparison with the big powers who control the security forces and the courts.

But the next four years will be crucial if Iran is to emerge as a catalyst in Middle East development.

Iran is still dreaded by the US as a country that gives assistance to alleged terrorist groups in the Middle East. Such a label needs to be dealt with immediately as it impacts upon international attitudes and practices toward Iran.

Meanwhile there has been talk of an Islamic Democracy in response to the electoral process in Iran.

This impression could get stronger if Khatami makes use of the popular mandate of this election to push through his economic-reform package for job-creation.

(Source: The Nation: Sunday, June 10, 2001, p.6A)

Questions : Write down the answers in English or Thai and explain how you got the answers.

1. What does this text mainly discuss?

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How did you get the answer? (In Thai)

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2. What should Khatami do to show his ability to govern Iran in his second term as President?

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How did you get the answer? (In Thai)

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3. According to the passage, why was Khatami voted to be a president of Iran again?

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How did you get the answer? (In Thai)

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4. What is the meaning of *mover and shaker* in line 9?

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How did you get the answer? (In Thai)

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5. What is the meaning of *catalyst* in line 11?

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How did you get the answer? (In Thai)

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6. How do you know from the text that Iran is not an Islamic democracy?

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How did you get the answer? (In Thai)

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7. What does the word *minute* in line 9 mean?

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How did you get the answer? (In Thai)

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8. Why is the USA afraid of Iran?

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.....

How did you get the answer? (In Thai)

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9. The word *who* in line 10 refers to

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How did you get the answer? (In Thai)

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10. The phrase *this impression* in line 18 refers to

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How did you get the answer? (In Thai)

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Explain in Thai: Write down in Thai what you think this sentence means. What difficulties do you have with understanding it? Why?

This impression could get stronger if Khatami makes use of the popular mandate of this election to push through his economic-reform package for job-creation.

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Name.....Number.....Class.....

Date.....

Reading Comprehension Task 3

Directions

1. There are two parts in this task and each part consists of two texts.
2. You will read the texts. Each one is followed by a number of open-ended questions about it. You are to write down the answers and explain how you get the answers.
3. At the end of each part you are to write down the difficulties you get from the providing sentence.

Part 1

This is a short extract from the autobiography of a rural Thai teacher. The writer tells us about her memories of school when she was seven years old. (In Thai for students)

It was fun to walk with friends to school in the morning: to kick sand all along the way; to hang on the rear of the ox-cart which was going on the way to school and laugh happily, that we did not have to walk; to look for wild fruits beside the path; to wade in every water pool in the low places in the rainy season; to sing the national anthem at the top of one's voice; to read the letters out loud together in class; to play in the break (there were many new games of sport now which both girls and boys could play together), and to hurry home hungrily when school was over.

And it was misery to be punished by the teacher now and then because our hair, nails fingers, hands were not clean; because we could not remember some of the letters that the teacher told us to memorise by heart; because we came to school too late when we had looked for the wild fruits too far out of the way and forgotten to notice the sunlight, and because we had fought with each other.

(Source: Little Things by Prajuab Thirabutana, 1971, p. 31)

Questions ; Write down the answers in English or Thai and explain how you got the answers.

1. According to the passage, what were the happy memories of the writer together with her friends?

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How did you get the answer? (In Thai)

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.....

2. Why did the teacher punish the writer and her friends?

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.....

How did you get the answer? (In Thai)

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3. What is the meaning of *now and then* in line 8?

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.....

How did you get the answer? (In Thai)

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4. What is the meaning of *to memorise by heart* in line 10?

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How did you get the answer? (In Thai)

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5. What does the word *rear* in line 2 mean?

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How did you get the answer? (In Thai)

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6. What does the verb *to wade* in line 3 mean?

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How did you get the answer? (In Thai)

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7. What does the phrase *national anthem* in line 4 mean?

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How did you get the answer? (In Thai)

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.....

8. What does the word *misery* in line 8 mean?

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.....

How did you get the answer? (In Thai)

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9. The word *which* in line 6 refers to

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How did you get the answer? (In Thai)

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10. The word *we* in line 10 refers to

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How did you get the answer? (In Thai)

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Explain in Thai: Write down in Thai what you think this sentence means. What difficulties do you have with understanding it? Why?

And it was misery to be punished by the teacher now and then because our hair, nails fingers, hands were not clean; because we could not remember some of the letters that the teacher told us to memorise by heart; because we came to school too late when we had looked for the wild fruits too far out of the way and forgotten to notice the sunlight, and because we had fought with each other.

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Part 2

This is a short extract from the autobiography of an American woman, who did not know any language until she was seven. She was blind and deaf. Here she writes about her first meeting with her teacher. (In Thai for students)

I felt approaching footsteps. I stretched out my hand as I supposed to my mother. Some one took it and I was caught up and held close in the arms of her who had come to reveal all things to me, and, more than all things else, to love me.

The morning after my teacher came she led me into her room and gave me a doll. When I had played with it a little while, Miss Sullivan slowly spelled into my hand the word "d-o-l-l." I was at once interested in this finger play and tried to imitate it. When I finally succeeded in making the letters correctly, I was flushed with childish pleasure and pride. Running downstairs to my mother I held up my hand and made the letters for dolls. I did not know that I was spelling a word or even that word existed; I was simply making my fingers go in monkey-like imitation. In the days that followed I learned to spell in this uncomprehending way a great many words, among them *pin, hat, cup* and a few words like *sit, stand* and *walk*. But my teacher had been with me several weeks before I understood that everything has a name

(Source: The story of my life, Helen Keller, 1961)

Questions ; Write down the answers in English or Thai and explain how you got the answers.

1. According to the passage, what happened between the writer and her teacher?

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.....

How did you get the answer? (In Thai)

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2.How did the writer start learning to write?

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How did you get the answer? (In Thai)

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3.What is the meaning of *to be flushed with childish pleasure and pride* in line 7-8?

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How did you get the answer? (In Thai)

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4.What is the meaning of *monkey-like imitation* in line 10?

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How did you get the answer? (In Thai)

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5. What does the verb *stretched out* in line 1 mean?

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How did you get the answer? (In Thai)

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6. What does the verb *to reveal* in line 3 mean?

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How did you get the answer? (In Thai)

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7. What does the verb *to imitate* in line 6 mean?

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How did you get the answer? (In Thai)

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8. The word *who* in line 2 refers to

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How did you get the answer? (In Thai)

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9. The word *it* in line 6 refers to

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How did you get the answer? (In Thai)

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10. The word *them* in line 11 refers to

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How did you get the answer? (In Thai)

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Explain in Thai: Write down in Thai what you think this sentence means.
What difficulties do you have with understanding it? Why?

Some one took it and I was caught up and held close in the arms of her who had come to reveal all things to me, and, more than all things else, to love me.

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Appendix B

A Questionnaire

There are two parts of this questionnaire.

Part A: Short answer questions.

Part B: Opinion-based questions.

Part A: Please check the one best response in [] of items 1, 2, 3, 5 and 6 and check all that apply of items 4 and 7.

1. What did you do at the beginning of each reading task?

- I read the questions.
- I read the whole text.
- I read a sentence or two and then a question.
- I read the questions and underlined unknown words.

2. How much do you think the Thai language helps your comprehension of English reading

- Very much
- Somewhat
- A little
- Not at all

3. Do you use translation while reading English?

- Yes, all the time.
- Yes, usually.
- Yes, seldom.
- No, never.

4. When do you use translation? Check all that apply.

- With finding main ideas
- With finding details
- With word meaning
- With sentence meaning
- With idioms
- With grammatical structure

5. When you think in Thai while reading, where does Thai help you most?

With the meaning of

- words
- phrases
- sentences
- main ideas

6. How often do you think in Thai while reading?

- All the time
- Usually
- Sometimes
- Seldom
- Never

7. What type of text is easy to understand? Check all that apply.

- From encyclopedia
- From newspapers
- From autobiographical books
- From novels
- From text books
- From magazines
- From internet

Part B: Write a few lines in Thai to give your opinion about these questions.

1. When you use Thai to help you with reading in English, how do you feel?

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2. If you had to think only in English and could not use Thai while you read, how would you feel?

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3. Do you think you should try to think in English more while you read? Why? Why not?

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4. Do you feel any different when you read a text which deals with Thailand compared with one about another country?

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Appendix C

Schedule for Gathering Data

Week	Day	Students	Time	Activities
First Week	Saturday	First Group	08.00 –	- Reading comprehension task 1,
			09.00 am	transactional texts, text 1, Bangkok
			09.00 -	- Retrospective interview
			10.00 am	
		10.10 -	- Reading comprehension task 1,	
		11.10 am	transactional texts, text 2, Wellington	
		11.10 am -	- Retrospective interview	
		12.10 pm		
	Second Group	13.00 –	- Reading comprehension task 1,	
		14.00 pm	transactional texts, text 1, Bangkok	
		14.00 –	- Retrospective interview	
		15.00 pm		
		15.10 -	- Reading comprehension task 1,	
		16.10 pm	transactional texts, text 2, Wellington	
		16.10 –	- Retrospective interview	
		17.10 pm		
Sunday	Third Group	08.00 –	- Reading comprehension task 1,	
		09.00 am	transactional texts, text 1, Bangkok	
		09.00 -	- Retrospective interview	
		10.00 am		
		10.10 -	- Reading comprehension task 1,	
		11.10 am	transactional texts, text 2, Wellington	
		11.10 am -	- Retrospective interview	
		12.10 pm		
	Fourth Group	13.00 –	- Reading comprehension task 1,	
		14.00 pm	transactional texts, text 1, Bangkok	
		14.00 –	- Retrospective interview	
		15.00 pm		

			15.10 -	- Reading comprehension task 1.
			16.10 pm	transactional texts, text 2, Wellington
			16.10 --	- Retrospective interview
			17.10 pm	
Second	Saturday	First	08.00 –	- Reading comprehension task 2.
Week		Group	09.00 am	editorial texts, text 1, Thai politics
			09.00 -	- Retrospective interview
			10.00 am	
			10.10 -	- Reading comprehension task 2.
			11.10 am	editorial texts, text 2, Iranian politics
			11.10 am -	- Retrospective interview
			12.10 pm	
		Second	13.00 –	- Reading comprehension task 2.
		Group	14.00 pm	editorial texts, text 1, Thai politics
			14.00 –	- Retrospective interview
			15.00 pm	
			15.10 -	- Reading comprehension task 2.
			16.10 pm	editorial texts, text 2, Iranian politics
			16.10 –	- Retrospective interview
			17.10 pm	
	Sunday	Third	08.00 –	- Reading comprehension task 2.
		Group	09.00 am	editorial texts, text 1, Thai politics
			09.00 -	- Retrospective interview
			10.00 am	
			10.10 -	- Reading comprehension task 2.
			11.10 am	editorial texts, text 2, Iranian politics
			11.10 am -	- Retrospective interview
			12.10 pm	
		Fourth	13.00 –	- Reading comprehension task 2.
		Group	14.00 pm	editorial texts, text 1, Thai politics
			14.00 –	- Retrospective interview
			15.00 pm	

			15.10 -	- Reading comprehension task 2,
			16.10 pm	editorial texts, text 2, Iranian politics
			16.10 –	- Retrospective interview
			17.10 pm	
Third	Saturday	First	08.00 –	- Reading comprehension task 3,
Week		Group	09.00 am	experiential texts, text 1, Thai narrative
			09.00 -	- Retrospective interview
			10.00 am	
			10.10 -	- Reading comprehension task 3,
			11.10 am	experiential texts, text 2, American narrative
			11.10 am -	- Retrospective interview
			12.10 pm	
		Second	13.00 –	- Reading comprehension task 3,
		Group	14.00 pm	experiential texts, text 1, Thai narrative
			14.00 –	- Retrospective interview
			15.00 pm	
			15.10 -	- Reading comprehension task 3,
			16.10 pm	experiential texts, text 2, American narrative
			16.10 –	- Retrospective interview
			17.10 pm	
	Sunday	Third	08.00 –	- Reading comprehension task 3,
		Group	09.00 am	experiential texts, text 1, Thai narrative
			09.00 -	- Retrospective interview
			10.00 am	
			10.10 -	- Reading comprehension task 3,
			11.10 am	experiential texts, text 2, American narrative

			11.10 am -	- Retrospective interview
			12.10 pm	
	Fourth		13.00 –	- Reading comprehension task 3,
	Group		14.00 pm	experiential texts. text 1. Thai narrative
			14.00 –	- Retrospective interview
			15.00 pm	
			15.10 -	- Reading comprehension task 3,
			16.10 pm	experiential texts. text 2. American narrative
			16.10 –	- Retrospective interview
			17.10 pm	
Fourth	Saturday	All	10.00 -	- Questionnaire
Week		Groups	11.00 am	

Appendix E

A Sample of Transcription from an interview

Task 1: Thai Transactional Text

Part 1 Text 1: Bangkok

Student No. S20T

Question	Content
-	<p>I: What was this text about? S: It was about Bangkok. It started with its background and it became a commercial centre. I: Have you known about Bangkok? S: A little bit. I've known that it is a commercial and monetary centre but I haven't known the background of the city.</p>
I	<p>I: "How did Bangkok become Krung Thep Mahanakorn or Bangkok Metropolitan City?" S: I didn't know the meaning of the phrase <i>Metropolitan City</i>. I: Have you known about the background of Bangkok establishment? S: No, never. I: How did you get the answer? S: I read from the text. I: Did you translate it into Thai? S: Yes, I did. I: Why did you translate it into Thai? S: For my understanding, I also rearranged the sentences in Thai for my understanding. I: Did Thai help you retrieve ideas? S: Yes. I: How? S: For understanding the sentences. I also rearranged sentences in Thai for myself to understand them better. I: Did Thai help you formulate ideas? S: Yes. I: How? S: Thai is my first language and I have understood Thai for a long time. I understand Thai better than English so I translated from English into Thai. Then I rearranged the sentences and the answer as well. I: Did Thai help you understand English found in the sentences? S: Yes. I: How? S: I took Thai words which I've never seen in English to join in English sentences. Therefore, It helped me understand the sentences in the text better. I: How did you take Thai words to join to English sentences? S: For example, I put the words "ซึ่ง" and "แล้ว" which are Thai words into the English sentences. These Thai words were used to join the sentences</p>

for my understanding of English sentences.

I: Let's see the structure of the sentences for your answer. Was it same or different from Thai structure?

S: It was different. Thai sentence was shorter than these sentences. There was some different punctuation used in these sentences.

I: What were they?

S: They were commas.

I: Were they commas?

S: Yes, it made a trouble when I tried to comprehend the text.

I: How?

S: It was difficult to know how to join clauses together when I read the text.

I: Did Thai structure help you answer this question?

S: Yes.

I: How?

S: After translating and rearranging the sentences into Thai, I could understand the text because I knew Thai better than English.

2

I: "Why is Bangkok the commercial centre of the city?"

Have you had previous knowledge about this?

S: Yes a little bit. I've known that Bangkok is the centre of commerce. Most goods are produced in Bangkok. Most people buy goods from Bangkok and sell them in other provinces.

I: Did this previous knowledge help you understand the text?

S: Yes, it did.

I: How?

S: It helped me understand the sentence easily though I didn't know the meaning of some words. I translated some words and could guess the meaning of some words from my previous knowledge.

I: How did you get the answer?

S: I read from the paragraph and answered. I didn't translate it into Thai.

I: Why didn't you translate it into Thai?

S: Because I knew the meaning of vocabulary in the sentence. I read the English text and understood it so I didn't translate it.

I: Was it easy or difficult to understand?

S: It was easy so I didn't translate it.

I: Did Thai help you retrieve ideas?

S: Yes, some.

I: How?

S: When I read the question which I had known the vocabulary, I thought in Thai and looked at the paragraph

I: Did Thai help you formulate ideas for this question?

S: Yes

I: How?

S: I looked at the sentence which asked for the reason so I could answer it.

I: Did Thai help you understand English found in the text?

S: Yes.

I: How?

S: It helped me understand the sentence for the answer.

I: Was the structure the same or different from Thai structure?

S: It was the same as Thai structure with subject, verb and object. The sentence was not complicated.

I: Did Thai structure help you answer this question?

S: Yes.

I: How?

S: Both Thai and English structures were the same with subject, verb and object. I compared the English sentence with the Thai sentence and they were similar so I could understand the text.

3 **I:** "Where is Bangkok?"

S: "Bangkok is located on the Choa Phraya River, about 25 miles from the Gulf of Thailand."

I: Have you had the previous knowledge about this?

S: No, I haven't.

I: Have you known that it is located on the Choa Phraya River?

S: Yes, I have but I didn't know how far it is from the Choa Phraya River.

I: Did your previous knowledge about this help you understand the text?

S: Yes.

I: How?

S: I didn't know the meanings of every word in the text but I could guess them from my previous knowledge about it. I could understand the text because of my previous knowledge although I didn't know the meaning of some words.

I: How did you get the answer?

S: There was the answer in the text and I noticed at the word "located". There were the details of the location of Bangkok in paragraph 2.

I: Did you think in Thai?

S: Yes.

I: Why?

S: I thought in Thai for understanding the text and for answering correctly. If I didn't

think in Thai, I was not sure about the answer.

I: Why weren't you sure about your answer?

S: Because There were some words in the paragraph that I didn't know the meaning. Therefore, I thought it should be this answer.

I: Did Thai help you retrieve ideas?

S: Yes.

I: How?

S: It helped me think quickly and used less time.

I: How did it help you retrieve ideas?

S: It helped me understand the text by thinking in Thai and could find the answer quickly.

I: Did Thai help you formulate ideas?

S: Yes.

I: How?

S: There was a comma but I didn't know what the comma modified.

When I thought in Thai, I also rearranged the sentence by using Thai words to join to the sentence. I didn't need to translate word by word from English words.

I: Did Thai help you understand English found in the sentence?

S: Yes.

I: How?

S: From the text, there were many words that I could change into Thai for understanding. I could more interpret from the English sentence by translating these words.

I: Was the structure the same or different from Thai structure?

S: It was different not much.

I: How?

S: There were tenses with infinitive, past tense and past participle but not in Thai.

I: Did Thai structure help you answer this question?

S: Yes.

I: How?

S: English sentences were more complicated than Thai sentences so it made me confuse. I could understand easily by thinking in Thai than in English.

4

I: "What is the meaning of *the original city* in line 5?"

S: I didn't know the meaning so I guessed that it was a simple city or a small city. It wasn't the capital city or the important city as nowadays.

I: Why did you guess like this?

S: I looked at its context.

I: Did you think in Thai?

S: I translated it into Thai. I started with translating the word *city* and then added an adverb or an adjective to the word *city* but I could not get the answer. Therefore, I thought in Thai in order to guess the meaning easily because I didn't know the meaning of this phrase.

I: Did Thai help you understand English found in the text?

S: Yes.

I: How?

S: It helped much, especially; with the unknown vocabulary or the words which I could not remember the meaning because I seldom used them. It helped me because when I read the text I also translated the sentence into Thai. I thought that which words should be substituted to Thai words that I had already translated.

I: Was the structure same or different from Thai structure?

S: It was different.

I: How?

S: The modifier or an adjective was before a noun as in *the original city* but in Thai the noun *city* should be before an adjective *original*.

I: Did Thai structure help you answer this question?

S: Yes?

I: How?

S: I translated it by using Thai structure. I translated the complexity of English sentence by using Thai form. It was easily to understand.

5

I: "What is the meaning of *the unified city* in line 6?"

S: I answered this question in Thai. It meant that the city was established to be the capital city officially. I didn't know the meaning of the word *unified*. I tried to guess it but I couldn't solve it.

I: Where did you guess from?

S: I guessed from the prefix *uni* combined with the word *city* and guessed from the context.

I: How did you get the answer?

S: I read the context shown in the paragraph.

I: Did you think in Thai?

S: Yes, I did.

I: Why did you think in Thai?

S: Because I didn't know the meaning of the word *unified* so I tried to translate the sentence into Thai and then tried to think that which word should be the word *unified* in Thai.

I: Did you translate the surrounding words first?

S: Yes, I did. Then I tried to translate the meaning of the word *unified*.

I: Did Thai help you retrieve ideas?

S: Yes.

I: How?

S: It helped me understand the sentence even though I didn't know the meaning of some words.

I: Did Thai help you formulate ideas?

S: Yes.

I: How?

S: When I used Thai structure, I could formulate my ideas better. It helped me understand the text better than using English structure that I was not accustomed to.

I: Was the structure same or different from Thai structure?

S: It was different because of the modifier.

I: What?

S: Word order in Thai was different from in English. When I translated the phrase *unified city* into Thai, I had to start with the word *city* and followed by the word *unified*.

I: Did Thai help you understand the English phrase shown in The text?

S: Yes.

I: How?

S: It helped me formulate ideas easily and I could write in English pattern better by translating into Thai first and wrote in English later.

6

I: "What is the meaning of *other outlying areas* in line 7?"

S: I answered in English. It was the areas which were the single city province. It meant that it was a single city that would become a big city.

I: Why did you translate like this?

S: I couldn't think it out.

I: Why did you translate it into Thai?

S: For my understanding.

I: Did you try to interpret it?

S: Yes, I thought in two ways. The other meaning was *the city which was*

free from being a colony.

I: Why did you think like this?

S: Because I couldn't solve it.

I: Did Thai help you retrieve ideas?

S: Yes.

I: How?

S: It made me understand the English text better than I didn't translate it into Thai.

I: Did Thai help you formulate ideas?

S: Yes.

I: How?

S: I could write it in different styles from rearranging it into Thai before writing in English.

I: Did Thai help you understand English found in the text?

S: Yes.

I: How?

S: It helped my ideas....I translated it into Thai by using simple words and a simple sentence. It was shorter than the English sentence.

I: Was the structure same or different from Thai structure?

S: It was different.

I: What were the differences?

S: A comma was used to join clauses and there was past participle in English. *-Ed* was added to a verb in English for past participle but there wasn't past participle in Thai?

I: Did Thai structure help you answer this question?

S: Yes.

I: How?

S: I rearranged it into Thai and then translated it into English from Thai structure again. When I changed the Thai sentence to be the English sentence I used verbs....tenses. It was more complicated.

7 I: "What does the word *handles* in line 8 mean?"

S: It might be a shop....a branch of a shop.

I: Why did you think it was a branch of a shop?

S: I looked at the context around *which handles*. I translated the surrounding words first and then tried to think about the meaning of the unknown word. I didn't know the meaning of this word.

I: Why did you think in Thai?

S: It made me understand the word easily although I didn't know the meaning of that word.

I: Was it good for thinking if you translated into Thai?

S: Yes.

I: Did Thai help you retrieve ideas?

S: Yes.

I: How?

S: I rearranged sentences in simple Thai pattern. It was easier to answer in Thai than the sentences which did not translate into Thai.

I: Did Thai help you formulate ideas?

S: It was easier to write and to understand sentences by thinking in Thai.

I: Did Thai help you understand English found in the text?

S: Yes.

S: As I told you that I translated from the surrounding words or context and then found out the meaning of the missing word.

I: Was the structure same or different from Thai structure?

S: It was different. *Adverb* and *-s* were added into the sentence so it was difficult to understand the sentence. It was more difficult than in Thai.

8

I: "What does the word *houses* in line 12 mean?"

S: I thought that it was Bangkok.

I: Why did you think that it was Bangkok?

S: Because I looked at the phrase *Bangkok houses* and other words in a sentence. Therefore, I thought that *houses* meant Bangkok which was as houses.

I: Let's see this sentence again. Is it a noun or a verb?

S: I think it is a verb.

I: You told me it was a noun.

S: It was not clear.

I: Why did you think it was noun?

S: The word *houses* was usually used as a noun.

I: Therefore, you thought that it was a noun.

S: Yes. I didn't notice it.

I: Did you translate before answering?

S: Yes.

I: Why?

S: Because I didn't understand it so I thought it was a compound word as *Bangkok houses*.

I: Did Thai help you retrieve ideas?

S: Yes.

I: How?

S: Because I thought it was a compound word so I translated by starting from the word *houses* and then the word *Bangkok* as word order in Thai.

I: What did you think the phrase *Bangkok houses* mean?

S: It might be a construction.

I: Did Thai help you formulate ideas?

S: Yes.

I: How?

S: It made a long sentence shorter and easier to understand.

I: Did Thai help you understand English found in the text?

S: Yes.

I: How?

S: I began translating first and then tried to understand it?

I: Was the structure same or different from Thai structure?

S: It was much different.

I: How?

S: There was a word that you easily misunderstood and I translated this word to be a known word. I translated it from my own understanding but I didn't notice what part of speech was.

9

I: "The word *it* in line 2 refers to..."

What was your answer?

S: I thought it was Bangkok.

I: Why did you think it was Bangkok?

S: I looked at the following words in the sentence; *it is Thailand's cultural and commercial centre*. From these words, the answer should be *Bangkok*.

I: Did you translate it into Thai?

S: Yes, I did.

I: Why?

S: For understanding.

I: Did Thai help you retrieve ideas?

S: Yes, it did.

I: How did it help you?

S: It helped me think quickly.

I: Did Thai help you formulate ideas?

S: Yes.

I: How?

S: Translating by using Thai structure was easier to understand than translating by using English structure.

I: Did Thai help you understand English found in the text?

S: Yes.

I: It helped me understand the text. Using pronouns in English was quite difficult. When I translated the sentence into Thai, I substitute a pronoun by the other word.

S: Was the structure same or different from Thai structure?

I: It was different with modifiers.

S: For examples...

I: In Thai, an adjective *cultural* should be after a noun *centre*.

10

I: "The word *which* in line 9 refers to..."

S: The city economy.

I: Why do you think that it referred to the city economy?

S: I looked at its context. The previous clause was *the city's economy is centred on its port* so I noticed from *the country's exports and imports*. It should refer to the city economy.

I: Did you notice from the following phrase but not from the previous clause?

S: Yes, I noticed both.

I: Did you translate into Thai?

S: Yes.

I: Why?

S: Because there was a relative pronoun *which* was different from in Thai but I tried to rearrange it to be Thai pattern to make me understand it. If I thought in English, I would be confused because of a comma which was used to join English clauses together.

I: Did the comma make you confused?

S: Yes.

I: Did Thai help you retrieve ideas?

S: Yes.

I: How?

S: When I translated a long sentence with a comma, I didn't think about the comma so I could understand it easily.

I: Did Thai help you formulate ideas?

S: Yes.

I: How?

S: When I read a complicate phrase as *on its port* in English, I put the words into a sentence as word order in Thai. Therefore, I could understand them better. I translated it by using Thai patterns but didn't translate it by using English patterns because it was difficult to understand.

I: Did Thai help you understand English found in the text?

S: Yes.

I: How?

S: It made me understand the text better than thinking in English. I understood the sentence which did not have joining words as in English.

I: Was the structure same or different from Thai structure?

S: Different.

I: How?

S: In Thai, we didn't use many commas or confused modifiers such as *all* or *of*.

I: Did Thai structure help you answer this question?

S: Yes.

I: How?

S: When I translated using Thai structure, it was easy to understand. Some words in English had several meanings such as *of*.

**Explain
in Thai**

"The city's economy is centered on its port, which handles nearly all of country's exports and imports, and on its commerce and industry."

I: Please tell me the meaning of this sentence in Thai.

S: It's a centre of economy and a centre of other provinces. It's a city for imports and exports and also a monetary and industrial city.

I: What difficulties did you have with understanding?

S: Commas and unknown words were difficulties that I had with understanding. I knew some words but I could not translate it accurately.

I: What are they?

S: For example, the word *handles*.

I: What about the sentence?

S: There was a conjunction *and* which was joined many clauses. The inflection of verb forms was also the difficulty.

I: Tenses.

S: It was changed as past tense or past participle in a sentence.

I: Why was it your problem?

S: Because the inflection of verbs or tenses in Thai is not complicated as in English.

**Extra
Questions**

I: How often did you think in Thai while reading?

S: Usually.

I: What problems with understanding the text did you think in Thai?

S: I thought in Thai when I met the problems with unknown words and grammar. Tenses or the inflection of verbs were also the problems for comprehending the text.

i: When did you think only in English not in Thai?

S: Sometimes.

I: When?

S: When I've already had previous knowledge about the text, I didn't translate it.

I: We've finished the interview. Thank you.

Appendix F

Consent Forms

Student Consent Form (1)

**English reading comprehension of Thai undergraduates:
L1/L2 usage, texts, strategies and problems**

Rapeeporn Sroinam

Faculty of Community Services, Education and Social Sciences

Edith Cowan University

The purpose of this study is to investigate the role of the Thai language in English reading comprehension. The second year teacher trainee students majoring in English at the faculty of Education, Rajabhat Institute Udon Thani have special needs for a study of reading. You will do a reading comprehension task, be interviewed, and answer a questionnaire. You will be asked to be tape recorded while engaging in the interview. You will be able to see your results for the reading comprehension task. However, nobody will be able to see any other person's scores. The results of the study will not affect your final grade for the course.

The investigator is currently a doctoral candidate at Edith Cowan University in Australia. Therefore, consent for collecting data by participants is required for conducting of ethical research involving human subjects.

Participation in this study could be useful to many future students as well as yourself. You will take part in this study on three weekends, both Saturday and Sunday, during the period 18th January – 2nd February 2003 at the room # 720 and on each occasion the time involved is approximately two hours.

Participation in this study is completely voluntary. If you wish to withdraw from the study at any time or decline to answer any question, your right to do so will be respected. Your answers in this study will be kept confidential and the tapes will be erased once the interviews have been transcribed. You will not be identifiable and your name will not be used in any reports of the research.

Any questions concerning the study can be directed to Rapeeporn Sroinam on 042-211040 Extension 410 (office) or 042-327708 (home), or the Dean of Faculty of Humanities and Social Sciences

Assistant Professor Suraphong Leauthongchack
Faculty of Humanities and Social Sciences
Rajabhat Institute Udon Thani
64 Taharn Road, Muang,
Udon Thani 41000
Telephone 042 211040 Ext. 401

I have read the information above and any questions I have asked have been answered to my satisfaction.

I agree to participate in this activity, realizing I may withdraw at any time.

I agree that the research data gathered for this study may be published provided I am not identifiable.

I understand that I will be interviewed and the interview will be audio recorded. I also understand that the recording will be erased once the interview is transcribed.

Participant..... Date

Print Name.....

Investigator..... Date.....

Print Name.....

Student Consent Form (2)

English reading comprehension of Thai undergraduates: L1/L2 usage, texts, strategies and problems

Rapeeporn Sroinam

Faculty of Community Services, Education and Social Sciences

Edith Cowan University

The purpose of this study is to investigate the role of the Thai language in English reading comprehension. The second year teacher trainee students majoring in English at the faculty of Education, Rajabhat Institute Sakon Nakhon have been selected for a pilot study. You will do a reading comprehension task, be interviewed, and answer a questionnaire. You will be asked to be tape recorded while engaging in the interview. You will be able to see your results for the reading comprehension task. However, nobody will be able to see any other person's scores. The results of the study will not affect your final grade for the course.

The investigator is currently a doctoral candidate at Edith Cowan University in Australia. Therefore, consent for collecting data by participants is required for conducting of ethical research involving human subjects.

Participation in this study could be useful to many future students as well as yourself. You will take part in this study for about four hours on Saturday 21st 2002 from 10.00-12.00 am and 13.00-15.00 pm at the language center.

Participation in this study is completely voluntary. If you wish to withdraw from the study at any time or decline to answer any question, your right to do so will be respected. Your answers in this study will be kept confidential and the tapes will be erased once the interviews have been transcribed. You will not be identifiable and your name will not be used in any reports of the research.

Any questions concerning the study can be directed to Rapeeporn Sroinam on 042-211040 Extension 410 (office) or 042-327708 (home), or the Dean of Faculty of Humanities and Social Sciences

Assistant Professor Suraphong Leauthongchack
Faculty of Humanities and Social Sciences

Rajabhat Institute Udon Thani
64 Taharn Road, Muang,
Udon Thani 41000
Telephone 042 211040 Ext. 401

I have read the information above and any questions I have asked have been answered to my satisfaction.

I agree to participate in this activity, realizing I may withdraw at any time.

I agree that the research data gathered for this study may be published provided I am not identifiable.

I understand that I will be interviewed and the interview will be audio recorded. I also understand that the recording will be erased once the interview is transcribed.

Participant..... Date

Print Name.....

Investigator..... Date.....

Print Name.....

A letter to the president (1)

Edith Cowan University

15 December 2002

Assistant Professor Charoon Thawornchak

President

Rajabhat Institute Udon Thani

Udon Thani, Thailand 41000

Dear President,

Seeking permission to conduct a research study

Further to the acceptance by Edith Cowan University of my research proposal entitled “**English reading comprehension of Thai undergraduates: L1/L2 usage, texts, strategies and problems**”, I would like to ask for your permission to carry out research with the second year students majoring in English, the Faculty of Education, Rajabhat Institute Udon Thani. These students will take part in this study on three weekends, both Saturday and Sunday, during 18th January 2003 – 2nd February 2003 at the room # 720.

This study aims to investigate the role of the Thai language in English reading comprehension. The students who will participate in this study will complete reading comprehension tasks, engage in an interview, and answer a questionnaire. The results of this study will lead to improvement in the methodology of teaching and learning English reading comprehension as well as the construction of new materials for English reading courses.

Your approval and support would be highly appreciated.

Sincerely yours,

Rapeeporn Sroinam

Any questions concerning the study can be directed to Rapeeporn Sroinam on 042-211040 Extension 410 (office) or 042-327708 (home), my principal supervisor, Dr Margaret Bowering, School of language and Literature, Edith Cowan University, telephone +61 8 9370 6206, facsimile +61 8 9370 6044, or the Dean of Faculty of Humanities and Social Sciences

Assistant Professor Suraphong Leauthongchack

Faculty of Humanities and Social Sciences

Rajabhat Institute Udon Thani

64 Taharn Road, Muang,

Udon Thani 41000

Telephone 042 211040 Ext. 401

The President Consent Form (1)

English reading comprehension of Thai undergraduates: L1/L2 usage, texts, strategies and problems

Rapeeporn Sroinam

Faculty of Community Services, Education and Social Sciences

Edith Cowan University

The purpose of this study is to investigate the role of the Thai language in English reading comprehension. The second year teacher trainee students majoring in English at the faculty of Education, Rajabhat Institute Udon Thani have been selected for the study. They will do a reading comprehension task, be interviewed, and answer a questionnaire. They will be asked to be tape recorded while engaging in the interview. They will be able to see their results for the reading comprehension task. However, nobody will be able to see any other person's scores. The results of the study will not affect their final grade for the course.

The investigator is currently a doctoral candidate at Edith Cowan University in Australia. Therefore, consent for collecting data by participants is required for conducting of ethical research involving human subjects.

Participation in this study could be useful to many future students. The results of this study will lead to improvement in the methodology of teaching and learning English reading comprehension as well as the construction of new materials for English reading courses.

The participants will take part in this study on three weekends, both Saturday and Sunday, during 18th January – 2nd February 2003, with approximately two hours being required of each student.

Participation in this study is completely voluntary. If participants wish to withdraw from the study at any time or decline to answer any question, they right to do so will be respected. Their answers in this study will be kept confidential and the tapes will be

erased once the interviews have been transcribed. They will not be identifiable and their names will not be used in any reports of the research.

Any questions concerning the study can be directed to Rapeeporn Sroinam on [REDACTED] Extension 410 (office) or [REDACTED] (home), or the Dean of Faculty of Humanities and Social Sciences

Assistant Professor Suraphong Leauthongchack
Faculty of Humanities and Social Sciences

Rajabhat Institute Udon Thani

[REDACTED]

[REDACTED]

Telephone [REDACTED] Ext. 401

Having read the above information, I recognise that I have been informed of the purpose and conduct of the research study. On the basis of this information, I allow the volunteer students to participate in the research study being undertaken by Rapeeporn Sroinam, Edith Cowan University.

Signature..... Date

Print Name.....

Investigator.....Date.....

Print Name.....

A letter to the president (2)

Edith Cowan University

15 December 2002

Assistant Professor Niphone Insin
President
Rajabhat Institute Sakon Nakhon
Sakon Nakhon, Thailand

Dear President,

Seeking permission to conduct a pilot study

Further to the acceptance by Edith Cowan University of my research proposal entitled **“English reading comprehension of Thai undergraduates: L1/L2 usage, texts, strategies and problems”**, I would like to ask for your permission to carry out a pilot study with the second year students majoring in English, the Faculty of Education, Rajabhat Institute Sakon Nakhon. These students will take part in this study on Saturday 21st December 2002 with approximately four hours being required from each student at the language center.

This study aims to investigate the role of the Thai language in English reading comprehension. The students who will participate in this study will complete a reading comprehension task, engage in an interview, and answer a questionnaire. The results of the study will lead to improvement in the methodology of teaching and learning English reading comprehension as well as the construction of new materials for English reading courses.

Your approval and support would be highly appreciated.

Sincerely yours,

Rapeeporn Sroinam

Any questions concerning the study can be directed to Rapeeporn Sroinam on [REDACTED] [REDACTED] Extension 410 (office) or [REDACTED] my principal supervisor, Dr Margaret Bowering, School of language and Literature, Edith Cowan University, telephone +61 8 9370 6206, facsimile +61 8 9370 6044, or the Dean of Faculty of Humanities and Social Sciences

Assistant Professor Suraphong Leauthongchack

Faculty of Humanities and Social Sciences

Rajabhat Institute Udon Thani

[REDACTED]

[REDACTED]

[REDACTED]

The President Consent Form (2)

English reading comprehension of Thai undergraduates: L1/L2 usage, texts, strategies and problems

Rapeeporn Sroinam

Faculty of Community Services, Education and Social Sciences

Edith Cowan University

The purpose of this study is to investigate the role of the Thai language in English reading comprehension. The second year teacher trainee students majoring in English at the faculty of Education, Rajabhat Institute Sakon Nakhon have been selected for a pilot study. They will do a reading comprehension task, be interviewed, and answer a questionnaire. They will be asked to be tape recorded while engaging in the interview. They will be able to see their results for the reading comprehension task. However, nobody will be able to see any other person's scores. The results of the study will not affect their final grade for the course.

The investigator is currently a doctoral candidate at Edith Cowan University in Australia. Therefore, consent for collecting data by participants is required for conducting of ethical research involving human subjects.

Participation in this study could be useful to many future students. The results of the pilot study will lead to improvement in the methodology of teaching and learning English reading comprehension as well as the construction of new materials for English reading courses.

The participants will take part in this study on Saturday 21st December 2002 from 10.00-12.00 am and 13.00-15.00 pm at the language center.

Participation in this study is completely voluntary. If participants wish to withdraw from the study at any time or decline to answer any question, they right to do so will be respected. Their answers in this study will be kept confidential and the tapes will be

erased once the interviews have been transcribed. They will not be identifiable and their names will not be used in any reports of the research.

Any questions concerning the study can be directed to Rapeeporn Sroinam on [REDACTED] [REDACTED] Extension 410 (office) or [REDACTED] (home), or the Dean of Faculty of Humanities and Social Sciences

Assistant Professor Suraphong Leauthongchack

Faculty of Humanities and Social Sciences

[REDACTED]

[REDACTED]

[REDACTED]

Having read the above information, I recognise that I have been informed of the purpose and conduct of the research study. On the basis of this information, I allow the volunteer students to participate in the research study being undertaken by Rapeeporn Sroinam, Edith Cowan University.

Signature..... Date

Print Name.....

Investigator.....Date.....

Print Name.....

Researcher assistant invitation letter

Edith Cowan University

15 December 2002

Researcher Assistants

The English Programs

Rajabhat institute Udon Thani

Udon Thani, Thailand 41000

Dear Researcher Assistants

I am currently a doctoral candidate at Edith Cowan University in Australia. I have made plans to do a research study with second year teacher trainee students majoring in English at the faculty of Education, Rajabhat Institute Udon Thani. My research title is **English reading comprehension of Thai undergraduates: L1/L2 usage, texts, strategies and problems.**

I would like to invite you to be a researcher assistant for this study as it could be useful to many future students as well as yourself. You will be trained to be an interviewer for retrospective interviews and transcribe data from cassettes after collecting data. You will take part in conducting a pilot study at Rajabhat Institute Sakon Nakhon on Saturday 21st December 2002 and the research study on Saturday and Sunday of three weekends, during 18th January – 2nd February 2003 at Rajabhat Institute Udon Thani.

I realise that the interviews and transcribing from cassettes in this study will occupy some of your available time, but I would appreciate your help. If you would like to take part in my study, please fill out the student consent form.

Sincerely,

Rapeeporn Sroinam

Researcher Assistant Consent Form

**English reading comprehension of Thai undergraduates:
L1/L2 usage, texts, strategies and problems**

Rapeeporn Sroinam

Faculty of Community Services, Education and Social Sciences

Edith Cowan University

The purpose of this study is to investigate the role of the Thai language in English reading comprehension. You are invited to be a researcher assistant for this study. You will assist the researcher to collect data from reading comprehension tasks, the interviews, and the questionnaire. You will conduct the interviews, tape record while interviewing, and transcribe the information from the interviews. You will need to keep the information from collecting data in this study confidential.

Participation in this study is completely voluntary. If you wish to withdraw from the study at any time, your right to do so will be respected. Your name will not be used in any reports of my research.

Any questions concerning the study can be directed to Rapeeporn Sroinam on 042-211040 Extension 410 (office) or [REDACTED] or the Dean of Faculty of Humanities and Social Sciences

Assistant Professor Suraphong Leauthongchack

Faculty of Humanities and Social Sciences

Rajabhat Institute Udon Thani

[REDACTED]

[REDACTED]

[REDACTED]

Having read the above information, I recognise that I have been informed of the purpose and conduct of the research study. On the basis of this

information I am willing to be a researcher assistant in the research study being undertaken by Rapeeporn Sroinam, Edith Cowan University. I understand that I will keep the information from collecting data in this study confidential and the participants will not be identifiable.

Signature..... Date

Print Name.....

Investigator..... Date.....

Print Name.....

Appendix G
A Letter to the Encyclopedia Britannica

Rajabhat Institute Udon Thani
[REDACTED]

December 14, 2002

The Editor,
The New Encyclopedia Britannica,

Britannica Centre
310 South Michigan Avenue
Chicago, IL, 60604
USA.

Dear Sir / Madam,

Re Permission to Use Excerpts
Doctoral Thesis

I am writing this letter to your organization to obtain permission to use two brief excerpts from the 1994, 15th edition of the New Encyclopedia Britannica, Vols 1 and 12 for inclusion in a doctoral thesis.

My doctoral work at Edith Cowan University in Perth, WA, Australia, involves studying the process of reading short texts such as the two chosen from your encyclopedia (copies of the extract from page 886, vol 1 and page 572, vol 12 are attached to this letter). Twenty of my students, who are studying English at Rajabhat Institute Udon Thani, will read the texts and answer questions about them. The extracts will be used only for that purpose and no copies will be sold.

I trust that you will be happy to give your consent to the use of these short passages. If you have any questions about this, I will be pleased to answer them.

Hoping to hear from you in due course.

Yours faithfully,

Rapeeporn Sroinam (Mrs.)
Lecturer in English
Rajabhat Institute Udon Thani

Part 1

Bangkok, Krung Thep, city, capital, and chief port of Thailand. As the only cosmopolitan city in a country of a small towns and villages, it is Thailand's cultural and commercial centre.

Bangkok is located on the Chao Phraya River, about 25 miles (40 km) from the Gulf of Thailand. In 1971 the original city merged with the former municipality of Thon Buri on the west bank of the Chao Phraya, and in 1972 the unified city was merged with other outlying areas to form a single city-province, Krung Thep Mahanakhon (Bangkok Metropolitan City).

The city's economy is centred on its port, which handles nearly all of the country's exports and imports, and on its commerce and industry. Principal industries include food processing and the production of textile and building materials. Bangkok houses a majority of the country's bank deposits and also is the base for several insurance firms.

(Source: The New Encyclopedia, Britannica, 1994, 15th edition. Volume 1, page 886)

Part 2

Wellington, capital city, port, and chief commercial centre of New Zealand is situated in the extreme south of the North Island. It lies on the shores and hills surrounding Port Nicholson, an almost landlocked bay that is ranked among the world's finest harbours. Mount Victoria rises 643 feet (196 m) near the centre of the city.

In 1826 two British vessels landed a working party on the site to collect flax and timber. In 1839 a ship belonging to New Zealand Company arrived with officials who were to select a site for the company's first settlement. The site chosen, at the mouth of the Hutt River, proved unsuitable, and a move was made to Lambton Harbour on the west shore. The settlement was named in 1840 in recognition of the aid given the company by the 1st Duke of Wellington. In 1865 the seat of the central government was transferred there from Auckland. The city is part of the Wellington local government region. The city's international airport is also the focal point of the country's internal aviation network.

(Source: The New Encyclopedia, Britannica, 1994, 15th edition, Volume 12, page 572)

Appendix H

A Letter from the Encyclopedia Britannica



ENCYCLOPÆDIA
Britannica

Rapeeporn Sroinam
[REDACTED]
[REDACTED]
[REDACTED]

Thailand
June 9, 2003

Dear Mrs. Rapeeporn Sroinam:

I apologize for the long delay in answering your request to incorporate two extracts from *Encyclopaedia Britannica* in your doctoral thesis. I regret any inconvenience this has caused you. We are happy to grant you permission to use these extracts, and we would appreciate your acknowledging the source. We wish you success in your studies.

With best regards,

Anita Wolff
Senior Editor
Encyclopaedia Britannica
awolff@eb.com

ENCYCLOPÆDIA BRITANNICA, INC. 310 SOUTH MICHIGAN AVENUE CHICAGO, ILLINOIS 60604 PHONE 312-347-7000

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