

ผลของการสอนการอ่านภาษาอังกฤษแบบเน้นมโนทัศน์ที่มีต่อความสามารถในการอ่านเพื่อความ
เข้าใจและการรับรู้ความสามารถของตนเองด้านการอ่านของนักเรียนมัธยมศึกษาตอนต้น



นางสาวจรินทร์ทิพย์ วรกิจสวัสดิ์

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาครุศาสตรมหาบัณฑิต

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ภาควิชาหลักสูตร การสอน และเทคโนโลยีการศึกษา

คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

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ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

EFFECTS OF CONCEPT-ORIENTED ENGLISH READING INSTRUCTION ON
READING COMPREHENSION AND READING SELF-EFFICACY OF
LOWER SECONDARY SCHOOL STUDENTS

Miss Jarintip Worakitsawat

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

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จรินทร์ทิพย์ วรกิจสวัสดิ์ : ผลของการสอนการอ่านภาษาอังกฤษแบบเน้นมโนทัศน์ที่มีต่อความสามารถในการอ่านเพื่อความเข้าใจและการรับรู้ความสามารถของตนเองด้านการอ่านของนักเรียนมัธยมศึกษาตอนต้น. (EFFECTS OF CONCEPT-ORIENTED ENGLISH READING INSTRUCTION ON READING COMPREHENSION AND READING SELF-EFFICACY OF LOWER SECONDARY SCHOOL STUDENTS) อ. ที่ปรึกษา: ผศ.ดร. อภัสรา ชินวรร โณ, 173 หน้า

การวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาผลของการสอนอ่านภาษาอังกฤษแบบเน้นมโนทัศน์ที่มีต่อความสามารถในการอ่านเพื่อความเข้าใจและการรับรู้ความสามารถของตนเองด้านการอ่านของนักเรียนชั้นมัธยมศึกษาตอนต้นที่มีผลสัมฤทธิ์ด้านการอ่านแตกต่างกัน กลุ่มตัวอย่างประกอบด้วยนักเรียนชั้นมัธยมศึกษาปีที่ 2 โรงเรียนจิตรลดา ภาคเรียนที่ 1 ปีการศึกษา 2550 จำนวน 84 คน การทดลองใช้เวลาทั้งสิ้น 10 สัปดาห์ สถิติที่ใช้ในการวิเคราะห์ความแตกต่างระหว่างความสามารถในการอ่านเพื่อความเข้าใจและการรับรู้ความสามารถด้านการอ่านของตนเองก่อนและหลังการทดลองคือ Paired samples t-test

ผลการวิจัยพบว่า (1) คะแนนเฉลี่ยจากแบบทดสอบการอ่านเพื่อความเข้าใจหลังการทดลองของนักเรียนชั้นมัธยมศึกษาตอนต้นที่มีผลสัมฤทธิ์ด้านการอ่านแตกต่างกันสูงกว่าคะแนนเฉลี่ยก่อนการทดลองอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 (2) คะแนนเฉลี่ยจากแบบสอบถามการรับรู้ความสามารถของตนเองด้านการอ่านหลังการทดลองของนักเรียนชั้นมัธยมศึกษาตอนต้นที่มีผลสัมฤทธิ์ด้านการอ่านแตกต่างกันสูงกว่าคะแนนเฉลี่ยก่อนการทดลองอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 กล่าวคือ นักเรียนชั้นมัธยมศึกษาตอนต้นที่มีผลสัมฤทธิ์ด้านการอ่านแตกต่างกันพัฒนาความสามารถในการอ่านเพื่อความเข้าใจ และการรับรู้ความสามารถของตนเองด้านการอ่านหลังจากเรียนการอ่านภาษาอังกฤษแบบเน้นมโนทัศน์

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

ภาควิชา หลักสูตร การสอนและเทคโนโลยีการศึกษา ลายมือชื่อนิสิต จรินทร์ทิพย์ วรกิจสวัสดิ์
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JARINTIP WORAKITSAWAT: EFFECTS OF CONCEPT-ORIENTED ENGLISH
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The objectives of this study were to examine the effects of Concept-Oriented English Reading Instruction on reading comprehension and reading self-efficacy of lower secondary school students at different reading achievement levels. The subjects were 84 lower secondary students (Grade 8) who studied at Chitralada School. The duration of the experiment lasted for 10 weeks. The Paired samples t-test was used to investigate the differences between students' mean scores from the pre and post reading comprehension test and the reading self-efficacy questionnaire.

The results of the analyses revealed that (1) the posttest mean scores from English reading comprehension test of lower secondary school students at different reading achievement levels were higher than the pretest mean scores at the significance level of 0.05 and (2) the posttest mean scores from reading self-efficacy questionnaire of lower secondary school students at different reading achievement levels were higher than the pretest mean scores at the significance level of 0.05. Lower secondary school students at different reading achievement levels improved their reading comprehension and their reading self-efficacy after receiving Concept-Oriented English Reading Instruction.

Department of Curriculum, Instruction, and Educational Technology

Student's signature J. Worakitsawat

Field of study Teaching English as a Foreign Language

Advisor's signature Apasara Chinwonno

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CHAPTER I

INTRODUCTION

In this chapter, the background and the statement of the problem are provided. It discusses the important role of the reading skill and reading self-efficacy in academic progress. Concept-oriented instruction and explicit instruction on comprehension strategies hold a promising role to help enhance students' reading comprehension and reading self-efficacy. Chapter 1, then, emphasizes why the research in the integration of conceptual knowledge and comprehension strategy on reading instruction is needed. Furthermore, it presents the research questions, the objectives of the study, the statement of hypotheses, the scope of the study, and the definitions of terms.

Background and Statement of the Problem

Over the past years, schools in Thailand have witnessed a failure in English instruction, which leads to the limited English proficiency of many Thai students. Language barriers can hinder academic progress, as well as social development. One of the central difficulties facing EFL students is reading. Development of proficient reading skills is crucial to school learning for all students. Anderson (2003) noted that with strengthened reading skills, learners of English tend to make greater progress in other areas of language learning. Alderson (1984) stated that reading a foreign language is important to academic studies, professional success and personal development.

From the interviews with English language teachers at Chitralada School together with the researcher's working experience at this school during 1998-2007, it

was found that students become overwhelmed with language and content while learning English. Some of them feel that the learning context is not meaningful while others do not know how to read leading to the inability to comprehend the written texts, and thus lack an individual's belief to do well in reading English.

The Basic Educational Curriculum B.E. 2544 (2001) mentioned the importance of promoting integration and collaborative teaching and learning as an integral part of the teaching and learning process. It is essential that educators should provide appropriate instruction in reading and create more reading opportunities for the students. Furthermore, a widespread goal of education in the secondary grades is reading comprehension for all students. Additionally, reading comprehension becomes especially important in the lower secondary grades and provides the basis for a substantial amount of learning in upper secondary school (Kirsch, de Jong, LaFontaine, McQueen, Mendelovits, & Monseur, 2002; Sweet & Snow, 2003).

Traditionally, students who are not successful in reading class are seen as lacking cognitive competencies, which may include reading comprehension, study skills, word recognition, and reading fluency (Guthrie & Davis, 2003). However, it is believed that the notion of the low reading achievers must be expanded to recognize that this individual is disengaged from literacy (Moje, Young, Readence, & Moore, 2000).

Disengaged readers tend to be notably unmotivated, which leads those readers to the lack of reading self-efficacy (Wigfield, Eccles, & Rodriguez, 1998). The students' sense of efficacy relates to their reading performance, and that training students both to be more efficacious and to believe they are more efficacious improves students' achievement in reading (Schunk & Zimmerman, 1997). Hence,

when students believe they are competent and efficacious at reading, they should be more likely to engage in reading.

Without the skills of reading comprehension and the motivation for reading to learn, students' academic progress is limited (Alvermann & Earle, 2003). Central to the rationale for this investigation is the finding that motivation and engagement contribute to reading comprehension (Guthrie et al., 2004). One reason that motivation and engagement may influence the development of reading comprehension is that motivated students usually want to understand the content, the text, and then process information deeply. As they read frequently with these cognitive purposes, motivated students gain reading comprehension proficiency (Guthrie, Wigfield, Metsala, & Cox, 1999). Therefore, it is absolutely important for teachers to find ways to engage students in reading activities in order to help increase their comprehension and self-efficacy.

According to Guthrie and Cox (1997), reading instruction that can enhance both reading comprehension and reading self-efficacy should incorporate concept or content and language learning. In addition, recent research on reading has focused on the process of comprehension and has identified three main factors which account for successful comprehension; namely, prior knowledge, text structure, and strategies. Successful language learners need reading strategies to help them comprehend better.

Furthermore, Taboada and Guthrie (2004) also stated that explicit instruction on reading comprehension strategies leads to the increase of students' self-efficacy. When students learn those strategies, they foster their reading self-efficacy. Some researchers have found that teachers can support students' reading self-efficacy by teaching students the skills that they need to be competent readers (Guthrie, Anderson, Alao & Rinehart, 1999; Guthrie & Cox, 1997; Guthrie et al., 2000; Guthrie

et al., 1998; Guthrie et al., 1996b; and Swan, 2003; Wigfield, Guthrie, Tonks & Perencevich, 2004).

The use of local community for learning resources and activities enables students to connect what they learn in the academic work with other areas of their life. The study by Numrich (2004) revealed that using the community as a source content, the community for learning activities, and the community for learning experiences could assist the students in contextualizing language production and comprehension. The King's Projects are rich community resources available to support the instructional setting. Since the school and the Projects are located on the same ground of Dusit Palace, so it is quite convenient to arrange many field trips without interrupting other subject periods and allow students to learn in new environment outside the classroom. In addition, the King's Projects can provide content experts who can speak English and various kinds of materials in the target language because the Projects are well known among other countries.

An instructional framework specifically designed to motivate students to acquire conceptual knowledge about content area subjects as well as language through the use of comprehension strategies may be an alternative to EFL reading instruction (Liang & Dole, 2006). However, in Thai context the integration of content, language, and comprehension strategy instruction is rare. Therefore, Concept-Oriented English Reading Instruction is designed to incorporate the King's Projects as content, language, and comprehension strategy instruction to enhance lower secondary school students' reading comprehension and reading self-efficacy. Consequently, the study investigates if the proposed Concept-Oriented English Reading Instruction is effective for reading English as a foreign language.

Research Questions

Two research questions were explored in this study.

1. To what extent does Concept-Oriented English Reading Instruction improve reading comprehension scores of lower secondary school students at different reading achievement levels?

2. To what extent does Concept-Oriented English Reading Instruction affect reading self-efficacy of lower secondary school students at different reading achievement levels?

Objectives of the Study

This study aimed:

1. To examine the effects of Concept-Oriented English Reading Instruction on reading comprehension of lower secondary school students at different reading achievement levels.

2. To examine the effects of Concept-Oriented English Reading Instruction on reading self-efficacy of lower secondary school students at different reading achievement levels.

Statement of Hypotheses

Previous research on concept-based or content-based instruction clearly supported the idea that such instruction facilitates students' reading comprehension. For instance, Grabe (2004) found that integrating content and language are likely to be more effective than approaches in which language is taught in isolation.

Additionally, previous research showed that students who receive explicit comprehension strategy instruction generally read better than those who do not, leading to the improvement in their self-efficacy. For example, Pressley (2006) suggested that extensive and explicit reading strategy instruction is designed to give students the tools that they needed to become better readers. These tools were also essential for students to develop reading self-efficacy. Therefore, the following hypotheses were tested.

1. The posttest mean scores on English reading comprehension of lower secondary school students at different reading achievement levels are higher than the pretest mean scores at the significance level of 0.05.

2. The posttest mean scores on reading self-efficacy of lower secondary school students at different reading achievement levels are higher than the pretest mean scores at the significance level of 0.05.

Scope of the Study

1. The population for this study was lower secondary school students from Chitralada School, Bangkok.

2. The variables in this study were as follows:

Independent variables were Concept-Oriented English Reading Instruction and levels of reading achievement (low reading achievement and high reading achievement). Dependent variables were English reading comprehension and reading self-efficacy.

Definitions of Terms

1. Concept-Oriented English Reading Instruction refers to an English reading instruction using the King's Projects as community materials to orient the concept or the content area. It was designed to motivate students to learn language and conceptual knowledge about the King's Projects through the use of comprehension strategies. This framework combines learning about language, content and comprehension strategies (See p. 49 for details of Concept-Oriented English Reading Instruction).

2. Reading achievement is the level of reading ability at which an individual is estimated to be functioning based on the reading group in which a student is placed (Harris & Richard, 1995).

3. English reading comprehension is defined as the ability to understand meanings of words, phrases and sentences, the recovery of author's meaning and the appropriate interpretation of the text. English reading comprehension is the group's mean scores from the pre and post reading comprehension test constructed by the researcher. The same test is administered twice, before (pretest) and after (posttest) implementing Concept-Oriented English Reading Instruction.

4. Reading self-efficacy refers to the belief that one can be successful at reading and the satisfaction of mastering or assimilating complex ideas in text. Reading self-efficacy consists of reading confidence and reading challenge which are determined from the mean scores on the reading self-efficacy questionnaire before (pretest) and after (posttest) receiving Concept-Oriented English Reading Instruction.

5. Lower secondary school students refer to those who are in Grade 8. They are equivalent to Mathayomsuksa 2 students and are studying at Chitralada School, Bangkok.

6. Different reading achievement levels are based on the reading group in which a student is placed. Of 30 items from the pre English reading comprehension test, students who scored lower than 10 were classified as low reading achievers and those who gained higher than 17 were labeled as high reading achievers.

Outline of the Study

This thesis consists of five chapters.

Chapter I is the introduction section that provides background to the present study. It includes the statement of the problem, research questions, objectives, and hypotheses. Also, scope of the study and definitions of terms are included.

Chapter II reviews the underlying theoretical frameworks and previous research studies that are considered relevant to the study. The concepts discussed are categorized into 4 main areas including reading comprehension, comprehension strategies, concept-oriented instruction, and reading self-efficacy.

Chapter III deals with the research methodology of the study. This includes the research design, context, population and samples, research procedures, research instruments, and the methods of data collection and data analysis.

Chapter IV presents the results of the study in accordance with the research questions.

Chapter V summarizes the study, discusses the findings and suggests implications and recommendations for teachers and further research.

CHAPTER II

REVIEW OF THE LITERATURE

This part of the study explores Concept-Oriented Reading Instruction which is the focus of this study. First, a definition of reading comprehension, components of reading abilities, comprehension strategies, and research related to reading comprehension are discussed. Then, a general description, instructional practices and a framework of Concept-Oriented Reading Instruction are described. The benefits of Concept-Oriented Reading Instruction are explained as well as research on Concept-Oriented Reading Instruction. Finally, the definition, sources of reading self-efficacy information and research on reading self-efficacy are explained.

Reading Comprehension

In this section, a definition of fluent reading comprehension, components of reading abilities, models of the reading process, and research on reading comprehension are discussed.

Definition of Reading Comprehension

Reading comprehension is an active process in which a reader plays a very active role in constructing meaning based on their backgrounds, purposes for reading, and the overall setting. In order to successfully read for general comprehension, readers need to understand information in a text and interpret it appropriately.

Reading comprehension is a complex cognitive task which has an interactive and constructive nature. It emphasizes an active learner who directs cognitive

resources to comprehend a text. Reading for general comprehension is the most basic purpose for reading (Grabe & Stoller, 2002). It is often accomplished by a fluent reader whose skills occur automatically.

According to Grabe and Stoller (2002), there are 10 processes involved in fluent reading comprehension. Fluent reading is 1) a rapid process 2) an efficient process 3) an interactive process 4) a strategic process 5) a flexible process 6) an evaluating process 7) a purposeful process 8) a comprehending process 9) a learning process and 10) a linguistic process.

Fluent reading is a rapid process in almost any context. The more rapidly a text is read, the better the various processing components are likely to operate.

Fluent reading is an efficient process. This means that the various processes involved in comprehension must be coordinated and certain processes need to be carried out automatically.

It is also an interactive process. Reading is interactive in the sense that linguistic information from the text interacts with information activated by the reader from long-term memory, as background knowledge. These two knowledge sources (linguistic and background) are essential for building the reader's interpretation of the text.

Fluent reading is a strategic process. Balancing skills needed for comprehension also requires that the reader be strategic. The reader needs to recognize processing difficulties, address imbalances between text information and reader knowledge, and make decisions for monitoring comprehension and shifting goals for reading.

Next, fluent reading is also a flexible process. Being a fluent and strategic reader means being able to read flexibly in line with changing purposes and the ongoing monitoring of comprehension.

Similarly, reading is an evaluating process in that the reader must decide if the information being read is coherent and matches the purpose for reading. This evaluation also involves with reader's motivations for reading, the readers' attitudes toward the text and topic, the reader's feelings of likely success or failure with text comprehension, and the reader's expectation that the information from the text will be useful.

Reading is always purposeful. It is purposeful in the sense that readers read in different ways based on differing reading purposes and that any motivation to read a given text is triggered by some individual purpose on task, whether imposed internally or externally.

Reading is also a comprehending process. It is obvious that understanding a text is the purpose for reading and such understanding must be carried out by the reader.

One outcome of reading being a purposeful and comprehending process is that it is also a learning process. This means that reading is the most common way for students to learn new information.

Lastly, reading is a linguistic process. In this aspect, readers discuss or interpret a text while engaging with it linguistically. If readers cannot understand any words, they are not going to comprehend the text.

It is suggested that no one process defines reading comprehension by itself, but together the processes provide an accurate account of what is required for fluent reading comprehension (Alderson, 2000).

Components of Reading Abilities

Grabe and Stoller (2002) outlined the way that reading comprehension processes are likely to work for fluent readers by dividing the explanation into two parts: lower-level processes and higher-level processes. The lower-level processes represent the more automatic linguistic processes and are typically viewed as more skill-oriented. The higher-level processes generally represent comprehension, involving interpretation of the texts, combination of reading strategies, making inferences and drawing extensively on background knowledge (Grabe, 1999).

The lower-level processes

The most fundamental requirement for fluent reading comprehension is rapid and automatic word recognition or the calling up of the meaning of a word as it is recognized. These skills are difficult to develop without exposure to print through many hours of reading practice. Fluent L1 readers can recognize almost all of the words they encounter, at least at some basic meaning level.

The higher-level processes

The higher-level processes more closely represent what we typically think of as reading comprehension. As good readers, we form a summary model of what the text is likely to mean. We also construct a more elaborated interpretation, establish purposes of reading, draw on background knowledge, monitor comprehension, form attitudes about the text and critically evaluate the information being read.

In sum, the lower-level and the higher-level processes are components of able readers, which help them to cope with reading effectively. These two levels of reading abilities are consistent with skills of fluent readers including recalling word meanings, drawing inferences about the meaning of a word in context, finding

answers to questions answered explicitly or in paraphrase, weaving together ideas in the content, drawing inferences from the content, recognizing a writer's purpose, attitude, tone and mood, identifying a writer's technique, and following the structure of a passage (Davis, 1968).

Models of the Reading Process

Reading is a mental process that works in the brain to comprehend written text (Barnett, 1989). A reading model is a graphic attempt to depict how an individual perceives a word, processes a clause, and comprehends a text (Singer & Ruddell, 1985). First language learning researchers categorized into the three following groups: 1) the bottom-up models focusing on decoding skills at a word and structure level; 2) the top-down models focusing on reader's background knowledge and inference; and 3) the interactive models combining the bottom-up and top-down models and offering insights for second/foreign language reading.

Bottom-up models

Bottom-up models consider reading as a process in which small chunks of text are absorbed, analyzed, and gradually added to the next chunks until they become meaningful (Barnett, 1989). With regard to this model, La Berge and Samuels (1974) also suggested that the reader's understanding depends on what appears in the text while the reader performs two tasks when reading which are decoding and comprehending. The decoding involves going from the printed word to some articulatory or phonological representation of the printed stimulus.

In conclusion, the bottom-up models emphasize lower-level processes. The lower-level processes represent the more automatic linguistic processes and are typically viewed as more skills oriented. The reader begins with the written text (the

bottom), and constructs meaning from the letters, words, phrases, and sentences found within and then processes the text in a series of discrete stages in a linear fashion.

Top-down models

Top-down models consider reading as a linear process which moves from the top, the high-level mental stages, down to the text itself. The higher-level processes are employed in top-down models. The higher-level processes generally represent comprehension processes that make much more use of the reader's background knowledge and inferencing skills (Grabe, 1999).

Inferencing is a prominent feature of top-down models, as is the importance of a reader's background knowledge (Goodman, 1968; and Smith, 1973).

In conclusion, the works of Goodman (1968) and Smith (1973) on top-down reading theory indicated the influence of cognitive psychology. It emphasizes the concepts of schemata which enable readers to make sense of the word and the text.

Interactive reading models

Interactive models refer to a combination of bottom-up and top-down models. The interactive reading theory greatly influences second and foreign language reading because it answers the question of how vocabulary skills relate to comprehension and suggests that comprehension depends on the printed text. The models relating to the interactive reading are discussed as follows.

Because reading is the active process of negotiating meaning between a reader and an author, both of them create meaning in varying degrees (Pearson & Tierney, 1984). Rumelhart's Interactive-Activation of Schema Model (1977) explained that comprehension occurs when a reader uses syntactic, semantic, lexical, and orthographic information on the reader's perception of print. This is similar to Coady's psycholinguistic model of the ESL reader (1979). It proposed that in order to

comprehend a text, the reader must combine the letter-sounds, syllables, morphemes, syntax, semantics, cognitive strategies and affective mobilizers in his mind. Additionally, Coady (1979) stated that readers comprehend the text through the interaction of three components: the reader's conceptual ability, process strategies, and background knowledge.

In conclusion, reading is an interactive process between the reader and the text. An interactive reading model recognizes the interaction of bottom-up and top-down processes simultaneously throughout the reading process. The level of reader comprehension of the text is determined by how well the reader variables such as background knowledge, attitude, and motivation interact with the text variables including text type, structure, syntax, and vocabulary.

Comprehension Strategies

Comprehension strategies can be defined as “deliberate actions that learners select and control to achieve desired goals or objectives” (Pressley, 2006, p. 17). This definition underscores the active role that readers take in strategic reading. Students need to learn how to orchestrate the use of reading strategies to achieve the desired result. Grabe and Stoller (2002) pointed out that “a strategy is a sequence of activities, not a single event and learners may have acquired some of the sequence” (p. 83).

Researchers have suggested that teaching readers how to use strategies is a prime consideration in the reading classroom. While teaching L2 readers how to use a given strategy, they must also be taught how to determine if they are successful in their use of that strategy. Pressley (2006) emphasized that low-proficiency readers need guided practice if strategy training is to be successful. Such training can emphasize the “when” and “why” of strategy use at least much as the “what”.

The role of teacher explanation is an integral part of success in learning how to verify strategy use. Anderson (1999) suggested five elements that can be included in teacher explanations about strategy use: (1) what the strategy is, (2) why the strategy should be learned, (3) how to use the strategy, (4) when and where the strategy is to be learned, and (5) how to evaluate the use of a strategy. Teaching the reader how to monitor successful use of a strategy may be more important than previously thought. A cognitive understanding of what should be done is not enough to guarantee success while reading. The reader must also understand how to apply the use of a given strategy. Anderson (1999) indicated that “the most significant finding from these data suggests that there is no single set of processing strategies that significantly contributes to success” (p. 468) in second language reading tasks.

There are various comprehension strategies used by skilled readers (Grabe & Stoller, 2002). According to Anderson (1999), comprehension strategies refer to 24 common reading strategies. These 24 strategies are divided into three different groups: cognitive reading strategies (thinking), metacognitive reading strategies (thinking about your thinking/ planning), and compensating reading strategies.

Cognitive reading strategies

1. Predicting the content of an upcoming passage or section of the text.
2. Concentrating on grammar to help you understand unfamiliar constructions.
3. Understanding the main idea to help you comprehend the entire reading.
4. Expanding your vocabulary and grammar to help you increase your reading.

5. Guessing the meaning of unfamiliar words or phrases to let you use what you already know about English.
6. Analyzing theme, style, and connections to improve your comprehension.
7. Distinguishing between opinions and facts in your reading.
8. Breaking down larger phrases into smaller parts to help you understand difficult passages.
9. Linking what you know in your first language with words in English.
10. Creating a map or drawing of related ideas to enable you to understand the main ideas.
11. Writing a short summary of what you read to help you understand the main ideas.

Metacognitive reading strategies

12. Setting goals for yourself to help you improve areas that are important to you.
13. Making lists of relevant vocabulary to prepare for new reading.
14. Working with classmates to help you develop your reading skills.
15. Taking opportunities to practice what you already know to keep your progress steady.
16. Evaluating what you have learned and how well you are doing to help you focus on your reading.

Compensating reading strategies

17. Relying on what you already know to improve your reading comprehension.
18. Taking notes to help you recall important details.

19. Trying to remember what you understand from a reading to help you develop better comprehension skills.
20. Reviewing the purpose and tone of a reading passage so you can remember more effectively.
21. Picturing scenes in your mind to help you remember and understand your reading.
22. Reviewing key ideas and details to help you remember.
23. Using physical action to help you remember information you have read.
24. Classifying words into meaningful groups to help you remember them more clearly.

Apart from common reading strategies discussed earlier, RAND Reading Study Group (2002) suggested that comprehension strategy that is deeply connected within the context of subject matter learning, such as social studies, history and science, foster comprehension development. The National Reading Panel report (NICHD, 2000) basically generated a list of comprehension strategies that is believed to support concept-based instruction. These strategies include (1) activating background knowledge (2) skimming (3) note-taking (4) summarizing, and (5) creating graphic organizers.

Activating background knowledge

The strategy of activating background knowledge refers to recalling experiences and knowledge of texts before reading, for the purpose of linking new content to prior understanding. In activating background knowledge, students should activate knowledge that is relevant to the text topic and use important text cues, such

as the title, headings, and pictures so that their knowledge statements link to the new text.

Skimming

Skimming refers to searching for information, seeking and finding a subset of information in the total text by forming specific goals, selecting particular sections of text, extracting information accurately, combining new and old information, and continuing until goals are fulfilled. In skimming, students should be able to determine keywords or add relevant synonyms or new terms to get information needed.

Note-taking

Note-taking is a way of remembering, recalling, and identifying key facts and important details. Readers who take good notes understand more of what they read. In addition, it can help students think through important information until they truly understand what they read.

Summarizing

Summarizing refers to forming an accurate, abstract representation of text after reading all or a substantial portion of material. Teaching strategy for summarizing can consist of enabling students to identify central ideas or concepts in a text or a passage by locating keywords and identifying supporting factual information.

Creating graphic organizers

Creating graphic organizers refers to constructing a spatial representation of text-based knowledge, which may include drawings, concept maps, and diagrams. In creating graphic organizers, students should be able to relate ideas and make reference to various texts to show a hierarchy of knowledge, clusters of supporting information, and dynamic relations with causal links among concepts.

In the present study, five comprehension strategies proposed by The National Reading Panel report (NICHD, 2000) were applied in the instruction. This is because this study focused on concept-based instruction and therefore these strategies were valuable for gaining conceptual knowledge.

Research on Reading Comprehension

Significant progress has been made in reading research, and reading instruction is better for these advances. Advances in L1 contexts have led to many improvements in reading instruction, especially in terms of instructional techniques that build strategic processes and linguistic knowledge bases.

Recently, research on reading comprehension has put an emphasis on different issues in different ways. For example, the varying influences of reading skills, strategies, and background knowledge are now seen as important for both L1 and L2 readers. Also, the importance of discourse structure and the instructional benefits of graphic representations, the importance of cognitive strategic reading, and the importance of student interest, motivation, and positive attitudes for reading are the aspects that most reading professionals try to promote in the instructions. Similarly, the study on reading comprehension starts to explore the importance of content-based instruction as well as the need for extensive reading for reading development (Grabe & Stoller, 2002).

In this study, Concept-Oriented English Reading Instruction is evidently influenced by the interactive reading models and also the findings from several recent reading research studies. This instruction focuses on developing comprehension strategies for general reading comprehension including determining the meaning of words by context, identifying facts in the texts, identifying main ideas, drawing

inference from the content, and evaluating the information via the processes of constructing conceptual knowledge from a text through cognitive interaction and motivational involvement with the text (Guthrie and Ozgungor, 2002).

Concept-Oriented Reading Instruction (CORI)

One curricular framework rarely referred to in second and foreign language discussion of content-based instruction is Concept-Oriented Reading Instruction (CORI). CORI is an instructional framework designed to increase student engagement in literacy and content area (Guthrie et al., 1996a, p. 312). It is an approach to content learning and reading development that suits students with different language proficiency levels (Guthrie et al., 1998; Guthrie, Schafer, Von Secker, & Alban, 2000; Guthrie & Ozgungor, 2002). The instruction is organized around substantive, relevant conceptual themes that are broad and interdisciplinary, which is critical for young adolescents who strive to make connections between their lives outside and inside school. It is suggested that this content instruction results in language learning, content learning, increased motivation and increased interest levels (Grabe & Stoller, 1997). According to Swafford (2000), CORI is characterized by varied experiences for exploring science concepts, which is consistent with the diverse cognitive developmental needs of middle school students. Guthrie and McCann (1997, p. 140) stated that CORI also promotes goals such as the development of self-direction, collaboration, self-expression, and strategy competence.

In this study, the goals of Concept-Oriented Reading Instruction including conceptual themes, self-direction, collaboration, self-expression, and strategy competence has been adopted to provide long-term support for students' development

of reading comprehension and reading self-efficacy. For conceptual theme, the King's Projects were used as the content. Then, students set subgoals for their own reading and freely chose texts for reading. Concerning collaboration, students were encouraged to work together toward understanding the conceptual theme. For self-expression, students in the present study were supported in articulating their understanding of the conceptual theme through various forms of graphic organizers. For strategy competence, the teacher situated comprehension strategy learning in the contexts of the conceptual theme, real world experience, social collaboration, and self-expression.

Instructional Practices of Concept-Oriented Reading Instruction

Based on the engagement model of reading development, especially for middle school, the CORI approach suggests that reading comprehension is facilitated by reading engagement, which consists of the joint functioning of cognitive comprehension strategies and motivational processes. Consistent with these relationships, the model suggests that effective instruction for comprehension includes support for motivational, cognitive, conceptual, and social processes within the classroom (Guthrie & Davis, 2003; Guthrie et al., 2004, p. 406). Within CORI, students' motivation and engagement are explicitly supported through six practices: a) knowledge goals, b) real-world interactions, c) an abundance of interesting texts, d) autonomy support, e) strategy instruction, and f) collaboration support (Guthrie & Davis, 2003; Guthrie, Wigfield & Perencevich, 2004). These instructional practices were integrated in the four phases of CORI, which will be discussed in detail in the Framework of CORI section.

Knowledge goals

This practice refers to using content goals for reading instruction whose objectives emphasize understanding and communication about a specific topic with a knowledge domain. Classroom goals that emphasize students' understanding of meaningful materials are essential to motivation and cognitive strategy learning. The strategies necessary for effective reading, such as self-questioning, using background knowledge, comprehension monitoring, searching for information, and synthesizing multiple texts, are learned as tools for content knowledge acquisition (Wood, Willoughby, & Woloshyn, 1995 referred in Guthrie and Davis, 2003, p. 72-73).

Real world interactions

Having identified content goals, effective teachers initiate learning activities with real world interactions. The practice of using real world interactions provides opportunities for students to have sensory interactions with tangible objects. Real world interactions consist of hands-on activities such as observing, conducting experiments, re-enacting an event or viewing a video of the event. Real world interaction is a desirable starting point because it is intrinsically motivating. In this practice, it is crucial to link texts to the real world interactions.

An abundance of interesting texts

Using interesting texts for instruction refers to teaching from a variety of books, materials, and technology that are relevant to the learning and knowledge goals. An abundance of texts within the classroom and student links to community resources outside of the classroom, such as libraries and the Internet, are known to directly facilitate motivation and reading achievement (Guthrie, Schafer, Von Secker, & Alban, 2000; Schiefele, 2001). Within this practice, texts have a role as references, resources, and tools for learning.

Autonomy support

This autonomy support practice enables students to experience an authentic sense of control and decision making regarding their reading activities. Under these conditions, students can exercise limited choice, which enables them to be partially in control of their learning. In autonomy support, it is possible to negotiate what seems a fair amount of work assignments, allow students a bit of choice in the order in which they do their work, and give students some say in how they do their work. It is suggested that teaching with materials selected by students is engaging and enabling (Roe, 1997).

Strategy instruction

In strategy instruction practice, it means that direct strategy instruction is provided within each phase of Concept-Oriented Reading Instruction (CORI). In CORI, explicit strategy instruction is provided for the following reading comprehension strategies: activating background knowledge, note-taking, skimming, summarizing, organizing graphically, and structuring stories. Throughout, the strategies are modeled by the teacher; scaffolding is performed according to students' needs, with guided practice provided. Furthermore, these reading comprehension strategies are explicitly taught during the four phases of CORI framework which will be discussed in the following section. Consequently, strategy instruction fulfills the motivational need for self-perceived competence as well as the cognitive need for possessing skills that are central to text comprehension (Ryan & Deci, 2000).

Collaboration support

Collaboration support refers to students interacting with each other to learn. This may occur in pairs, small groups, or larger groups. Collaboration may include cooperative learning, which consists of group goals, individual accountability,

and team competitions (Slavin, 1996). With collaboration support, students will feel a sense of belonging in the classroom or the school and thus their reading engagement may be increased (Anderman, 1999).

These six instructional practices are summed up and examples of teaching and learning activities in these practices are also explained in Table 2.1 (Guthrie & Davis, 2003, p. 72).

Table 2.1

Instructional practices of Concept-Oriented Reading Instruction (Guthrie & Davis, 2003, p. 72)

Instructional Practices	Examples: Teaching/Learning Activities
Knowledge goals	Teaching with thematic units; Student questions as learning goals; Big ideas and supporting concept; Staying concept-oriented in reading.
Real world interactions	Hands-on activities; Inquiry science connections to reading; Historical enactments as basis of reading and writing instruction; Selecting personally relevant texts.
Interesting texts	Using trade books for reading instruction; Linking trade books and multimedia; Merging texts, illustrations, and animations in learning; Connecting themes from popular genre and classical literature; Using cultural responsive texts addressing adolescent characters, issues, and social crises; Diversity of text difficulty in the classroom.

Table 2.1 (Continued)

Instructional practices of Concept-Oriented Reading Instruction (Guthrie & Davis, 2003, p. 72)

Instructional Practices	Examples: Teaching/Learning Activities
Autonomy support	Student choices of specific texts for learning about a required topic; Student input into instructional decisions or tasks; Student construction of rubrics for evaluation of work.
Strategy instruction	Direct modeling, scaffolding, and guided practice for reading comprehension strategies such as activating background information, note-taking, skimming, summarizing, and creating graphic organizers.
Collaboration support	Teams work toward attaining multifaceted conceptual goals; Positive interdependence (students need each other to reach shared goal); Use individual expertise to learn and share with group; Build norms for interaction and evaluate these regularly; Require full participation in teams.

The six instructional practices of Concept-Oriented Reading Instruction all operate together dynamically. According to Guthrie and Davis (2003), these six features should be fused. Each of these features is a valuable contributor. That is, readers need both motivational and cognitive support. The motivational is increased with real-world interaction, interesting texts, autonomy support, and collaboration. On

the other hand, cognitive competence is increased by direct strategy instruction for a substantial amount of time.

Framework of Concept-Oriented Reading Instruction (CORI)

Guthrie, Wigfield, and Perencevich (2004) mentioned that the CORI framework consists of four phases which employ six instructional practices discussed earlier. The four phases of CORI are (1) observe and personalize, (2) search and retrieve, (3) comprehend and integrate, and (4) communicate to others

Phase 1: Observe and personalize

The first phase of CORI, observe and personalize, represents the motivational component of the framework. The major emphasis of this phase is to support students as they develop and express interest in the world around them (Guthrie, McGough, Bennett, & Rice, 1996; Guthrie et al., 1996). Real-life experiences are central to phase one. Students explore scientific concepts by observing or participating in hands-on, real-life experiences. These experiences serve to motivate, arouse curiosity, and activate background knowledge, which is vital for students.

Phase 2: Search and retrieve

This second phase capitalizes on students' interests and facilitates their search for information. In this phase, students are taught how to search for information from the internet, locate information within expository texts, use a diversity of community resources, and skim for information needed (Guthrie, Anderson, Alao, & Rinehart, 1999).

Phase 3: Comprehend and integrate

The third phase of CORI is to comprehend and integrate, which builds on the search and retrieve strategies students learned in phase two and on student interests generated in phase one. Teacher and peer modeling and small group discussions are utilized to facilitate comprehension and integration of information gathered previously. To promote comprehension and integration, instruction emphasizes helping students identify the central idea and critical details of a reading selection, summarize that information, and develop criteria for evaluating texts. Guthrie (1996) suggested that student-led small group discussions may be utilized when students integrate information from multiple sources.

Phase 4: Communicating to others

This fourth phase focuses specifically on communication. As students become experts on particular aspects of a concept, they communicate their understanding through discussion, debate, or written discourse. Authentic and varied opportunities for self-expression give students purpose for their learning and impact motivation. Like in the other phases, teacher support is crucial in the communication phase to help students develop effective communication skills. It is possible for students to choose a traditional written report or alternative forms of self-expression, such as poetry, drama, or illustration to communicate their understanding.

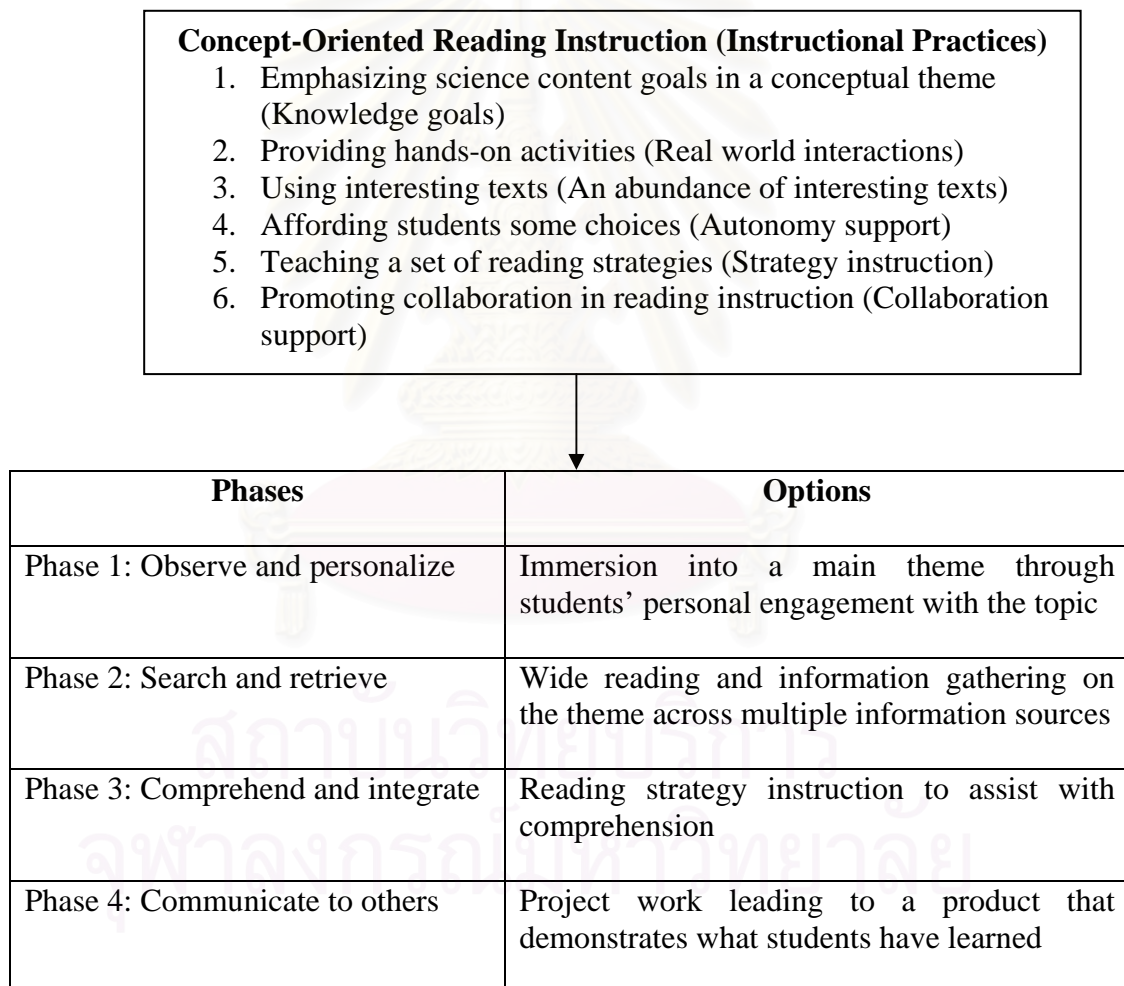
The four instructional phases of observe and personalize, search and retrieve, comprehend and integrate, and communicate to others are built around a conceptual theme to help students construct new knowledge. In addition, engaged reading is fostered in a classroom environment that promotes students' curiosity through observation and questioning, gives students the ability to search and comprehend

multiple texts about interesting topics, and allows students' knowledge to grow through communicating with others.

The instructional practices and the four phases of CORI are provided in the framework of Concept-Oriented Reading Instruction in Figure 2.1.

Figure 2.1

Framework of Concept-Oriented Reading Instruction (Guthrie, Wigfield, & Perencevich, 2004)



The Benefits of Concept-Oriented Reading Instruction

According to Anderson & Guthrie (1996), there are many benefits of CORI.

Three of the most important benefits include the following.

One benefit of CORI is the development of long-term motivation. With CORI, skills are developed to fulfill long-term motivational goals for reading. Students are empowered with the skills necessary to explore their world. Anderson & Guthrie (1996) asserted that motivations used by CORI students are intrinsic motivation, curiosity, aesthetic enjoyment, challenge, competitiveness and extrinsic motivation.

The second benefit is the development of long-term motivation coupled with higher-order thinking skills and strategy use. Within CORI, intrinsic motivation of students increases and that improves the higher-order cognitive competence. That is literacy engagement, which combines cognitive strategies with intrinsic motivation, increases for CORI students.

The third benefit is that CORI helps students to think conceptually and convincingly. Through CORI, students become experts on the topics about which they choose to learn. As they gain knowledge, students want to express their understanding to others.

The features and benefits of Concept-Oriented Reading Instruction described above make it a unique instructional medium with great potential for teaching and learning. Teachers who initiate and sustain Concept-Oriented Reading Instruction can help students gain skills and believe in themselves as readers. This newfound identity can help students to enter rather than exit the literate community.

Studies on Concept-Oriented Reading Instruction

Concept-Oriented Reading Instruction has been validated through multiple studies and CORI represents an approach that fully engages students in all aspects of strategic reading instruction. The findings from these studies all point to a similar conclusion that Concept-Oriented Reading Instruction improves students' reading

comprehension and motivation (Guthrie, Schafer , Wang, and Afflerbach ,1995; Guthrie, Bennett and McGough, 1994:).

To begin with, Guthrie, Schafer, Wang, and Afflerbach (1995) reported that students at grades 4 and 7 were likely to report relatively high reading activity if they frequently shared books with friends, and if a teacher who provided instruction in comprehension used cognitive and reading strategies appropriately. In addition, Guthrie, Bennett and McGough (1994, pp. 1-31) stated that Concept-Oriented Reading Instruction (CORI) was implemented in a year-long curriculum with a multicultural population of fifth- grade students in Calverton Elementary School, Maryland. Measures of learning suggested that students who had CORI for four months surpassed a comparison classroom in amount and breadth of reading and intrinsic motivations for reading. The CORI students gained significantly in the cognitive strategies of search and comprehension during the time period of four months.

CORI has also been used successfully with low-achieving students in elementary schools, middle schools, and high schools in different parts of the country (Guthrie, 1996; Guthrie et al., 1996b; Guthrie & McCann, 1997). Guthrie and McCann reported the results of a three- year investigation to determine its effectiveness. The first year, CORI was implemented in one fifth grade classroom. Results from student questionnaires revealed that intrinsic motivation of CORI students was higher than students who received traditional basal reading and science instruction.

In addition, the same study was extended in the second year to two fifth grade classrooms and two third grade classrooms in two different schools. The purpose was to assess literacy engagement, that is motivation, strategy use and, conceptual

understanding in science. Interviews were conducted to assess motivation and strategies. Results indicated that as intrinsic motivation increased, students read more frequently and the range of topics they chose to read about increased. Performance assessment was used to determine how effectively students could search for information across multiple texts and express their conceptual understanding of science concepts. Results indicated a strong relationship between increased intrinsic motivation and improved search strategies and comprehension.

Furthermore, in the third year of the study, performance of students receiving traditional basal language arts and science instruction was compared with students who received CORI instruction. The study was conducted in three third grade and two fifth grade CORI classrooms and five traditional classrooms across three schools. The conceptual learning measure indicated that fifth grade CORI students expressed more complex scientific understanding than their peers in the traditional classrooms, and they displayed better searching, reading, and writing strategies than their peers in traditional classrooms. Moreover, students in third grade CORI classrooms outperformed fifth graders in traditional classrooms.

Similarly, Guthrie, Anderson, Alao, and Rinehart (1999, pp. 343-366) investigated the effects of CORI on strategy use, conceptual learning, and text comprehension. In their study, five teachers provided CORI to 53 Grade 5 and 67 Grade 3 students. Five teachers provided traditionally organized instruction aimed toward the same objectives to 53 Grade 5 and 66 Grade 3 students. Students were from two low-income schools. The CORI context increased strategy use, conceptual learning, and text comprehension more than traditional instruction, when background was controlled. Thus, these results demonstrate the effectiveness of CORI for promoting intrinsic motivation, literacy strategy use, and language acquisition. The

latter is consistent with what Lightbown and Spada (1993) suggested. They indicated that language acquisition increases with content-based language instruction.

In addition, some research has been done on the impact of CORI on students' reading self-efficacy. One of the earliest studies to prove the positive effect of CORI on reading self-efficacy was conducted by Schunk and Rice (1985 referred to Guthrie at al., 1996). They reported that learning a strategy for reading increased students' reading self-efficacy. Students who were taught to verbalize a strategy for comprehension increased their belief in their personal capabilities for successful performance of a particular task. The author concluded that training students to use self-regulated learning strategies such as self-verbalization improved their perception of efficacy, motivation, and learning.

Similarly, CORI also proves to increase students' motivation. Wigfield and others (2004, pp. 299-309) presented initial results that examined how 2 reading instructional programs, Concept-Oriented Reading Instruction (CORI) and multiple Strategy Instruction (SI), influenced third grade students' intrinsic motivation to read and self-efficacy. Each reading program occurred during the fall of the school year and lasted 12 weeks. Approximately 150 third grade students participated in CORI and 200 third grade students participated in SI. Results of pre- and posttest analyses of students' responses to a reading motivation questionnaire showed that students' intrinsic motivation to read and reading self-efficacy increased only in the CORI group.

The core of using Concept-Oriented Reading Instruction to enhance learning is generally considered to be the motivational support and systematic, explicit instruction in reading comprehension, combined with a variety of resource books.

In conclusion, Concept-Oriented Reading Instruction reflects the belief that reading comprehension depends on a mixture of motivational support and cognitive strategies instruction. The first step in motivating students is to provide a knowledge goal for reading. The following steps are real-world interactions, autonomy support, interesting texts, and collaboration support. These elements can work together in reading comprehension instruction. When teaching has these qualities, students become deeply engaged in reading.

Reading Self-Efficacy

Self-efficacy in reading is necessary for continuing advancement in achievement. Therefore, in this section, definitions of reading self-efficacy, its components, and research studies related to self-efficacy in reading are discussed.

Self-Efficacy in Reading

Many psychologists have defined the meaning of self-efficacy in many ways. All of these definitions concern one's individual's belief about oneself. Bandura (1986, p. 391) and Baldwin (1998, p. 732) defined self-efficacy as an individual judgment on one's own capability in various situations. According to Bandura and Baldwin, self-efficacy depends on the judgment of skills one possesses. The self-efficacy perception can predict individual behavior. In addition, Shell, Murphy and Bruning (1989, p. 91) summarized the meaning of self-efficacy as the individual's confidence in whether he or she is able to fulfill or complete his or her assigned tasks. Likewise, Pajares and Miller (1994, p. 194) and Schunk (2000, p. 108) concluded that

students' self-efficacy refers to one's individual judgment of one's own ability in any particular situation. This self-efficacy is related to the individual's confidence.

Self-efficacy, especially in reading is necessary for continuing advancement in achievement. Students who have high self-efficacy believe they can tackle difficult texts and are confident that their efforts will be beneficial to them. Students with low self-efficacy will avoid doing the tasks when confronted with a text that appears lengthy, complex, or cognitively challenging (Guthrie, Wigfield, & Perencevich, 2004, p. 57). A student's level of self-efficacy is deeply dependent on his perceived success in important reading tasks (Schunk & Zimmerman, 1997). Children's development of self-efficacy in reading is related to their development of intrinsic motivation for reading (Baker & Wigfield, 1999). If students do not believe they have the capacity to read well, they will not believe they are in control of their book-related activities. Low self-efficacy makes it unlikely that a student will frequently choose to read or pursue curiosities through texts. Consequently, self-efficacy and intrinsic reading motivation are associated with each other (Wigfield, 1997).

Furthermore, some psychologists and educators define the meaning of reading self-efficacy as including individuals' assessments of their ability to read well. When individuals believe they can successfully complete activities, like reading a story or book, they will persist at the activity, attempt to read difficult books or stories, and choose to return to the activity when they have the opportunity (Bandura, 1997; Schunk & Pajares, 2002). Guthrie and others (2006, p. 14) explained self-efficacy for reading as the belief in one's capability at reading different texts, preferences for reading challenging books, and confidence in reading skills.

Initially, self-efficacy for reading was defined as the belief in one's capability to read well and to understand hard parts in books. Guthrie and others (2006), they

defined the characteristics of reading self-efficacy as follows: 1) belief in oneself as a good reader, 2) confidence in reading, 3) knowledge and use of strategies in reading, 4) ability to recognize most words, 5) ability to figure out the meaning of unfamiliar words, 6) a preference for challenging books, 7) feedback from parents or teachers about one's being a good reader, and 8) statements about oneself as reading well or better than other students.

Therefore, characteristics and attributes of self-efficacy in reading include beliefs about their capabilities at reading different texts, preferences for reading challenging books, and confidence in their reading skills.

Thus, it can be concluded that self-efficacy in reading is the personal self-confidence in making judgment on one's capability to read well. This is to self-evaluate how much one can achieve in reading activities. Self-efficacy perception has an influence on an individual's effort in completing one's task.

Sources of Self-Efficacy Information

Bandura (1997) stated that there are several main influences on students' self-efficacy. However, there are three most relevant to children's reading achievement.

Previous performance

Previous performance is the first and foremost influence on self-efficacy. When individuals do well at an activity, such as reading, they begin to develop a positive sense of efficacy for that activity. When they do less well, their sense of efficacy is less positive. An implication of this point is that children's early experiences with reading in school have a strong influence on their developing sense of self-efficacy for reading. In other words, when students achieve success in school,

their self-efficacy grows. As their success increases, so does their self-efficacy (Schunk & Zimmerman, 1997).

Peer success

A second influence on self-efficacy is watching others successfully complete an activity. When students see others accomplish a task, they often think that they can do it themselves. This is especially true when the person doing the activity is a peer. The reason is that the child thinks the peer is relatively similar to himself. However, teacher modeling can also help students learn to accomplish an activity.

Encouragement from others

This is where teachers can have particularly strong power. When teachers provide encouragement and support, students' self-efficacy can grow. Thus, it is important for teachers to provide positive feedback about children's performance whenever they can. Because of reading self-efficacy's influence on motivation and performance, it is essential that students develop a strong sense of their efficacy in reading so that they will become engaged in reading.

Studies on Reading Self-Efficacy

There are several studies showing the relationship between reading self-efficacy and reading achievement. Research has shown that children's reading self-efficacy in subject areas such as reading can be enhanced by providing children with skills necessary to do the activity better, as well as by direct feedback that they are capable of doing the activity (Schunk, & Zimmerman, 1997). In addition, researchers have shown that students with high reading self-efficacy do better on different reading

activities, choose more difficult reading activities to try, and persist at them even if they are having trouble completing them (Bandura, 1997; Schunk & Pajares, 2002).

A number of research studies have also proved that there is a relationship between reading self-efficacy, reading strategies and students' interests. Huang and Chang (1996) explored perceptions of students' reading self-efficacy in English learning. It was found that participants' interest in class assignment topics according to their own choice influenced reading self-efficacy. Another study to confirm such a link was done by National Capital Language Resource Center in 2000 and its results revealed that students who received reading strategy instruction also perceived themselves as more self-efficacious in reading. Similarly, many researchers also found students who received explicit reading strategy instruction and practice showed statistical significance on reading self-efficacy (McCrudden, Perkins & Putney, 2005; Nelson & Manset-Williamson, 2006)

With respect to reading efficacy and achievement, the fundamental tools taught in CORI classrooms are reading strategies. Teachers in CORI classrooms introduce individual reading strategies to students and work with them until each strategy is mastered. After that, strategies are combined so that students learn how to use them together. This strategy instruction provides all students with the fundamental tools they need to read a variety of different texts and materials, thereby allowing them to become strong readers. Such successful performance will likely enhance their competence and reading self-efficacy, leading them to read increasingly challenging books (Guthrie, Wigfield & Perencevich, 2004).

Summary

From the literature review, Concept-Oriented Reading Instruction (CORI), an approach to content learning and reading development used in first language settings, is an important curricular framework rarely referred to in second and foreign language discussions of content-based instruction (Guthrie & Ozgungor, 2002). CORI, which has major implications for second and foreign language content-based curricula, began with instructional principles for stimulating interest and motivation to read. It has evolved into a more elaborate, yet flexible approach organized around four stages: (1) immersion into a main theme through students' personal engagement with the topic, (2) wide reading and information gathering on the theme across multiple information resources, (3) reading strategy instruction to assist with comprehension, and (4) project work leading to a product that demonstrates what students have learned. A significant component of CORI is strategic instruction to support the extensive and varied input from text material required for thematic instruction. It also incorporates comprehension instruction activities that go beyond strategy training. In the development of the four phases of CORI, students engage in content discussions and activities that require the purposeful use of multiple strategies such as activating background knowledge, taking notes, summarizing, integrating information through graphic organizers, and carrying out a range of project tasks; they are accompanied by consistent teacher modeling, teacher scaffolding, and extensive practice. With an emphasis on student motivation to read and to learn, the approach involves discussions that center around content, reading goals, strategies, and learning while students are engaged with multiple information texts.

CHAPTER III

RESEARCH METHODOLOGY

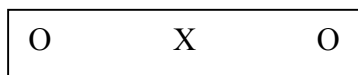
This chapter deals with the research methodology to explore the effects of Concept-Oriented English Reading Instruction on reading comprehension and reading self-efficacy of lower secondary school students. It includes the following topics: research design, context, population and samples, research procedure, research instruments, data collection, and data analysis.

Research Design

This study was a one group pretest posttest experimental design (pre-experiment) (Cohen & Manion, 1985). The English reading comprehension test and the reading self-efficacy questionnaire were used to measure Grade 8 students' reading comprehension ability and their reading self-efficacy. The independent variable referred to Concept-Oriented English Reading Instruction used in this study and the students' mean scores on these measures were dependent variables. The research design is illustrated as follows:

Figure 3.1

Research design



O means a pretest and posttest which was the same form of the test

X means a treatment which was Concept-Oriented English Reading Instruction

Context

Chitralada School is a private institution which provides an education ranging from kindergarten level to secondary level. His Majesty King Bhumibol founded the school and laid down the school's educational policies. At present, the school is under the supervision of HRH Princess Maha Chakri Sirindhorn and the Office of Private Education Commissions. Chitralada School and the King's Projects are located on the same ground of Chitralada Palace. His Majesty the King has allocated an area within the compound of his residence for use in agricultural research and experimentation in order that he may closely study and find the correct ways to remove the constraint.

Having been part of Chitralada School, students have long had deep understanding of how important the King's Projects are to Thai people. All Chitralada School students have been implanted with a sense of gratitude towards the royal family. Based on one of the school's major principles, the roles and responsibilities of the school are to generate students with knowledge and conscience, consciousness of the value of the King's Projects as rich local community resources available to support the instructional setting.

The school and the Projects are located on the same ground of Chitralada Palace, so it is quite convenient to arrange many field trips without interrupting other subject periods and allow students to learn in new environment outside the classroom. In addition, the King's Projects can provide content experts who can speak English and various kinds of materials in the target language because the Projects are well known among other countries.

Population and Samples

The population for this study was lower secondary students in the academic year 2007 of Chitralada School, Bangkok. The total number of lower secondary students according to the school registration office on 28th May, 2007 was 340. The samples for this study consisted of 84 students from Grade 8 Room 1 and 3, semester 1 in the academic year 2007. The samples were purposively selected. Grade 8 students were chosen because students at this level had already been exposed to the content area of the King's Projects when they studied science in Grade 7. Furthermore, according to the Basic Educational Curriculum B.E. 2544, Grade 8 students should have a knowledge of English vocabulary of at least 2,000 content words, which is considered to be a good basis for language use in second language learning (Hirsh & Nation, 1992). The students were pretested with the English reading comprehension test and the scores from the test were used to place the students in different reading achievement levels. The 30th and 70th percentile ranks were used to divide the samples into 2 reading achievement levels - low reading achievement level and high reading achievement levels (Tirakanant, 2003, p. 63). The average pretest scores of the students in different reading achievement levels were presented below.

Table 3.1

The average pretest scores

Reading Abilities	n	Min	Max	\bar{X}	S.D.
Low	27	4	10	7.90	1.79
Moderate	30	11	16	13.00	1.46
High	27	17	25	20.14	2.17
Total	84	4	25	13.66	5.27

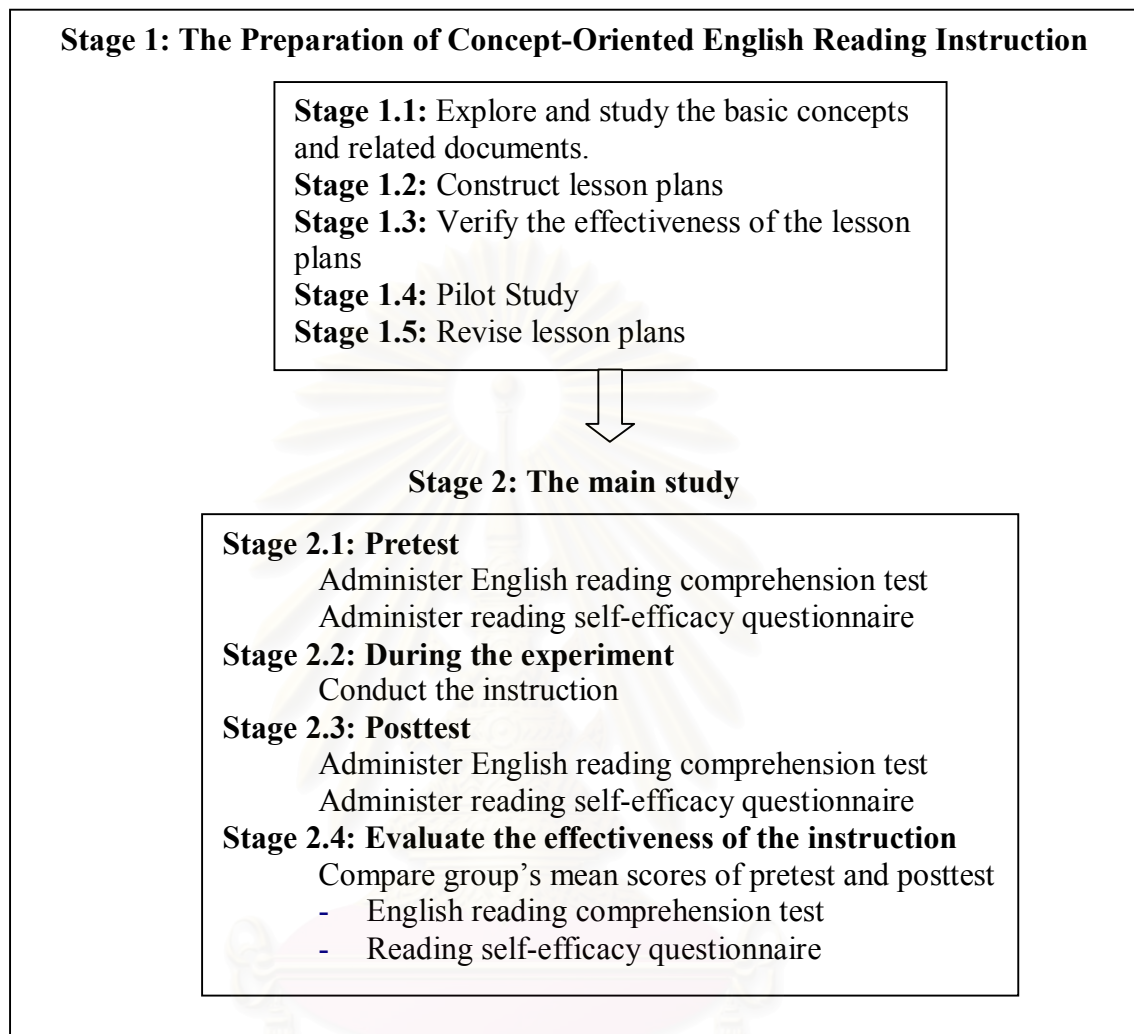
It can be seen from Table 3.1 that students who scored lower than 10 were classified as low reading achievers and those who gained higher than 17 were labeled as high reading achievers (See Appendix A, p. 126). Therefore, there were 27 students in both low reading achievement levels ($\bar{X} = 7.90$ S.D. = 1.79) and high reading achievement levels ($\bar{X} = 20.14$ S.D. = 2.17). Thirty students were in the moderate reading achievement levels ($\bar{X} = 13.00$ S.D. = 1.46). The total numbers of 84 students from Grade 8 were divided into low and high reading achievement levels. There were 27 students in each level and 30 students in the middle were put in the moderate reading achievement level.

Research Procedure

There were two stages of research procedures. The first stage involved the preparation of Concept-Oriented English Reading Instruction. The second stage involved the implementation of Concept-Oriented English Reading Instruction (See Figure 3.2).

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Figure 3.2

Research ProcedureStage 1: The Preparation of Concept-Oriented English Reading InstructionStage 1.1 Explore and study the basic concepts and related documents

The basic concepts and related documents dealing with Concept-Oriented English Reading Instruction and reading self-efficacy were explored. The theories and concepts of each can be summarized as follows.

1.1.1 The proposed framework of Concept-Oriented English Reading Instruction (See Figure 3.3)

In the present study, the researcher has adopted and has applied the six instructional practices and the four phases of CORI proposed by Guthrie and others (2004) discussed earlier in the literature review. The six instructional practices were integrated with the four phases of the instruction.

The first phase is called “observe and personalize.” The purpose of this phase was to build curiosity and interest in the concept in relation to the King’s Projects such as His Majesty the King and his working steps, The Monkey Cheek Project, and Chitralada Dairy Farm. This is the phase of instruction where engagement principles such as background knowledge activation, real-world interactions, teacher involvement, and social collaboration were implemented. In this phase, students were asked questions to activate their background knowledge and then practice activating their background knowledge about His Majesty the King and how he works on his projects. They also learned note-taking strategy and were guided to take notes during the activity. Students personalized their learning by taking notes or listing what they had learned from the video about the Royal Chitralada Project.

The second phase of the instruction is called “search and retrieve.” The purpose of this phase was to teach the students how to access the information they needed. This is the phase where the principles of interesting texts and comprehension strategy instruction such as searching skills, skimming, and text structuring were implemented. During this phase, students were taught to set up their purpose for reading by first asking themselves, “What question do I have?” Then, students were taught to answer their questions by looking for resources, ideas and information using skimming technique. With teacher’s modeling and scaffolding, students were shown how to skim through the websites and locate specific information about such topics as the King’s projects and the king’s working steps.

The third phase is called “comprehend and integrate.” The purpose of this phase was to teach students how to understand and synthesize information they have read. Comprehension strategy instruction such as summarizing was implemented to assist with comprehension. In this phase, students read a passage about his Majesty the King and his projects. The teacher showed students how to identify important ideas and write summaries about what they had read.

Finally, the fourth phase is called “communicate to others.” The purpose of this phase was to teach students how to communicate their knowledge and ideas in numerous ways to others. In this fourth phase of the instruction, various forms of self-explanation including concept-mapping and graphic organizers were introduced to the students. These forms of self-explanation were taught with teacher modeling and students sharing their organizational charts with other students.

What is added into the present study is the four teaching procedures that were integrated into each phase of the instruction. Drawing on comprehension strategy instruction, it is claimed that modeling and explanation of strategies followed by scaffolded and partner practice before practicing strategies individually is the instructional approach with the most compelling support and a more sensible approach (Pressley, 2006).

In this study, comprehension strategy instruction was presented in four teaching procedures: modeling and demonstration, scaffolding, partner practice and independent practice. Modeling and demonstrating is the first step. This includes showing students how to use the strategy when to use it and why. For example, in this study the teacher modeled and demonstrated how to the strategies such as activating background knowledge, note-taking, skimming, summarizing, concept-mapping, creating nonfiction organizer, and creating process notes. In addition, the teacher also

explicitly explained the reason for using such strategies and their benefits to the students.

Scaffolding is the second step which refers to the teacher's gradually releasing responsibility to the students. In this study, the teacher provided guided practice with authentic, purposeful tasks to show the students how to use the strategy. After explaining and modeling how to use each strategy, the teacher did the strategy with the students. For instance, the teacher provided a scaffolding activity of activating background knowledge by saying, "I showed you how I activate my background knowledge about His Majesty the King and how he works on his projects. But now I would like you to activate your background knowledge. Can you think of any questions to ask about these pictures? What do you know about His Majesty the King?" As the students answered, the teacher accepted and confirmed their information.

The third step is partner practice. This is a form of guided practice, but the teacher allows students to work with a partner or at their table with their peers to practice the strategy. For example, in order to practice activating background knowledge, the students in this study were asked to practice asking and answering questions about His Majesty the King and how he works on his projects with their partners.

The final step is independent practice. After students have practiced strategy instruction within a meaningful context, they need practice in implementing strategies alone. In this study; for example, after practicing stating background knowledge with partners, the students were required to practice this strategy individually by completing the background knowledge handout. Then, the teacher continued these four procedures with other strategies as well.

1.1.2 Reading Self-Efficacy

Self-efficacy in reading refers to individuals' assessments of their reading ability at different activities, and their sense that they can accomplish the activity (Bandura, 1997; Schunk & Pajares, 2002). There are two important parts of this definition; the belief that one is capable, and the explicit connection of that belief to the accomplishment of an activity. For Bandura, the link between belief and action is central to this definition of reading self-efficacy, and so reading self-efficacy clearly links to students' behavior. For instance, the students in this study were engaged in collaboration and also were exposed to more complex topics or texts. In addition, they were taught when and how to apply comprehension strategies to help them read better. As the students felt that they could comprehend better, the belief in their own capacities to read would become stronger.

A student believing he/she is efficacious at reading not only has that belief, but also effectively engages in reading activities, gains confidence in reading, and prefers reading challenge. Because of reading self-efficacy's influence on motivation and performance, it is essential that students develop a strong sense of their efficacy for them to be engaged in reading. Thus, in Concept-Oriented English Reading Instruction, strategy instruction is emphasized to develop students' expertise as readers, which helps them develop a sense of efficacy for reading.

Stage 1.2 Construct lesson plans

1.2.1 The information from the first stage was compiled and became a theoretical framework for the development of an instruction.

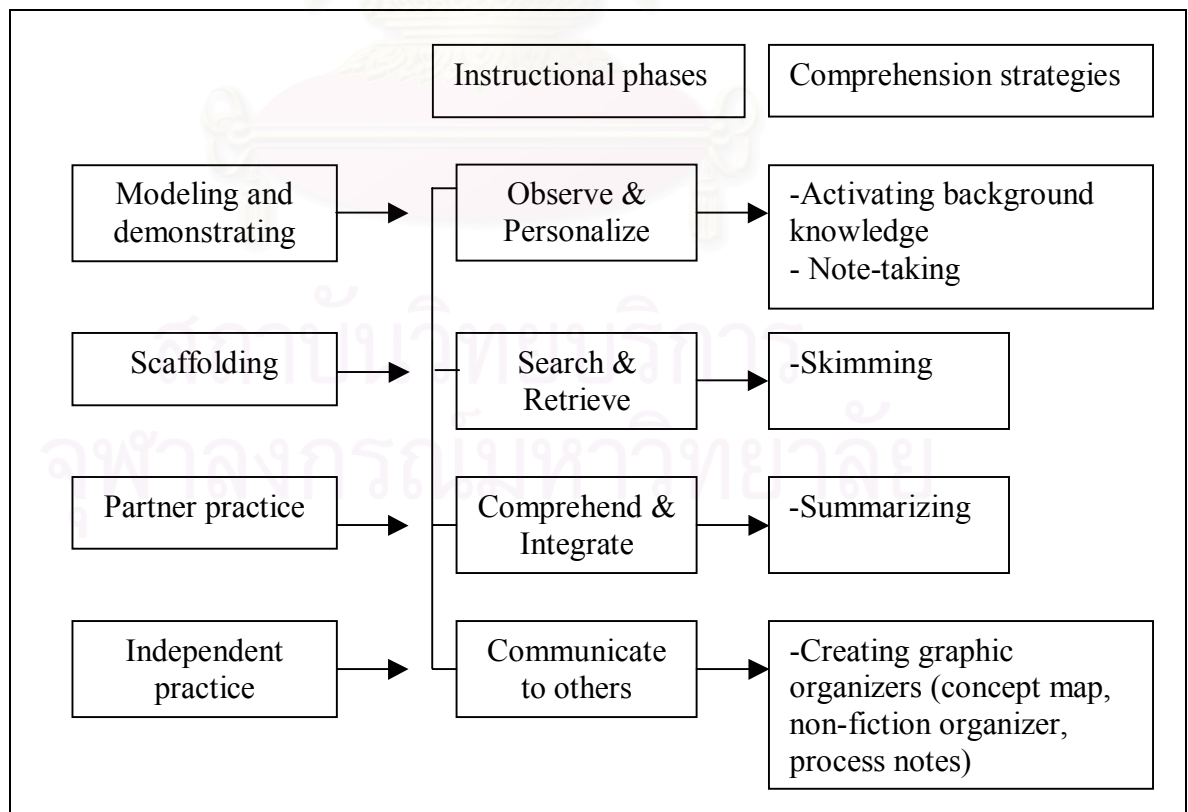
1.2.2 The instruction and its components were specified. A proposed framework of Concept-Oriented English Reading Instruction used in this study has

been modified from that of Guthrie and others (2004) discussed earlier. The proposed framework was illustrated in Figure 3.3.

Figure 3.3

The proposed framework of Concept-Oriented English Reading Instruction

<i>The proposed framework of Concept-Oriented English Reading Instruction</i>
<i>1. Students study social studies goals of the conceptual theme of His Majesty the King and his work. (Knowledge goals)</i>
<i>2. Students are exposed to real world experiences such as going on field trips to the King's Projects. (Real world interactions)</i>
<i>3. Students read texts from various sources such as texts from brochures or websites (An abundance of interesting texts)</i>
<i>4. Students read texts related to the theme based on their own interests. They can choose to read texts under the theme of the King's Projects. (Autonomy support)</i>
<i>5. Strategies are taught through modeling and demonstration, scaffolding, partner practice and independent practice. (Strategy instruction)</i>
<i>6. Students work in team. For example, they practice comprehension strategies with peers and create graphic organizers in at different reading achievement levels. (Collaboration support)</i>



1.2.3 Lesson plans were developed by the researcher. Each lesson plan included title of the lesson, content objectives, comprehension strategy, and activities. Fifteen lesson plans (5 lesson plans for each unit) were developed based on the scope and sequence using the following procedures.

1.2.3.1 Survey of content topics

Interview and the needs survey questionnaire were used to indicate the appropriate content topics. Two officials, one is the director of the academic affairs and the other one is the project lecturer from the Royal Development Projects were informally interviewed. Additionally, two English teachers at Chitralada School were also asked to examine the content topics as well. These two teachers have been teaching English to Grade 8 students for twenty-five and fifteen years respectively. Their response to the main theme, “H.M. the King and his work” was that *“Learning the content related to H.M. the King is one of the philosophies of Chitralada School. In addition, the school is responsive to enhance students to appreciate their own communities.”* Both teachers also indicated that there were 15 contents under the main theme which were suitable for Grade 8 students. They are Chitralada Dairy Farm, Rainmaking Operations, Rice Production and Processing, Chitralada Juice Production, The King and his working steps, Conservation of Soil, Reforestation, Monkey Cheek Project, Musical Composition, Waste Water Treatment, Fisheries, Chaipattana Aerator, The King and his study centres, Organic Fertilizer and Green Fuel.

There were reasons why these content topics were appropriate to Grade 8 students. First of all, Grade 8 students had already studied these content areas in terms of science the previous year. Secondly, according to Snow and Brinton

(1997), it is necessary for students to have some background knowledge on particular content areas since the contents can be accessible and are not too difficult for them.

Concerning the needs survey, the needs survey questionnaire was therefore designed based on the information gathered from the interviews (See Appendix B, p. 127). The needs survey questionnaire was distributed to the students in order to investigate their needs. One hundred and twenty-nine Grade 8 students in semester 1, academic year 2007 were asked to rank their needs on the Likert's scale under the main theme, "H.M the King and his work". The three most preferred topics were chosen including The Monkey Cheek Project (46.4% S.D. = .75), Chitralada Dairy Farm (34.7% S.D. = .77) and The King and his working steps (18.9% S.D. = .97) respectively (See Appendix C, p. 129).

1.2.3.2 Documents analysis

Reading passages from various resources such as Guidebook to the Royal Chitralada Project and the official website of the King's Projects available from www.royalchitralada.com, www.kanchanaphisek.com, and www.60thcelebrations.com had been explored in order to select three passages as the main texts. After the passages were selected from various sources, they were sent along with the lesson plans as part of the lesson materials and were analyzed in terms of their appropriateness to the students' level by the three language-teaching specialists (See Appendix D, p.130). The three passages were His Majesty the King and his working talent, The Keam Ling Project and Dairy Farm Dairy Products.

1.2.3.3 Lesson Plans

According to the results of the needs survey questionnaire, three concept-oriented to the King's Projects were selected in order to be developed as the content topics of the course. Fifteen lesson plans were developed (5 lesson

plans for each unit) based on the Concept-Oriented English Reading Instruction (See Appendix E, p.131). The lesson for each phase focused on one comprehension strategy such as activating background knowledge, note-taking, skimming, summarizing, and creating graphic organizers. The scope and sequence are presented in Figure 3.4.



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Figure 3.4

Scope and Sequence of Concept-Oriented English Reading Instruction

	Topic	Content Area	Phase	Comprehension Strategy	Activity	Vocabulary Focus
Unit 1	The King and his working steps	Steps of the implementation of the Royal Development Projects	Observe and Personalize	-Activating background knowledge -Note-taking	-Filling in a “ <i>Background knowledge Handout</i> ” -Completing a “ <i>Key word note</i> ” from the script and video, “ <i>His Majesty the King and the Royal Development Projects</i> ”	-survey -budget -advice -information -document -talent -to discuss -to fulfill -to monitor -to evaluate
			Search and Retrieve	-Skimming	-Skimming for specific information from websites www.60thcelebrations.com www.kanchanapisek.or.th www.google.co.th	
			Comprehend and Integrate	-Summarizing paragraphs	-Vocabulary exercise -Reading passage, “ <i>His Majesty the King and his work talent</i> ” -Completing a “ <i>Summary Handout</i> ”	
			Communicate to others	-Concept graphic organizer	-Creating a concept-map	

Figure 3.4 (Continued)

Scope and Sequence of Concept-Oriented English Reading Instruction

	Topic	Content Area	Phase	Comprehension Strategy	Activity	Vocabulary Focus
Unit 2	The Monkey Cheek Project	Flood Prevention in Bangkok	Observe and Personalize	-Activating background knowledge -Note-taking	-Filling in a “ <i>Venn Diagram</i> ” -Completing a “ <i>Summary Note</i> ” from the script and video, “ <i>The Monkey Cheek Project</i> ”	-flood -damage -kindness -several -modern -well-known -to solve -to prevent -to store -to fill up -to chew -to swallow
			Search and Retrieve	-Skimming	-Skimming for general ideas from websites www.chaipattana.org www.60thcelebrations.com www.deqp.go.th www.chaipat.or.th	
			Comprehend and Integrate	-Summarizing Non-fiction	-Vocabulary exercise -Reading passage, “ <i>The Keam Ling Project</i> ” -Completing a “ <i>Nonfiction Organizer</i> ”	
			Communicate to others	-Creating graphic organizer	-Creating web	

Figure 3.4 (Continued)

Scope and Sequence of Concept-Oriented English Reading Instruction

	Topic	Content Area	Phase	Comprehension Strategy	Activity	Vocabulary Focus
Unit 3	Chitralada Dairy Farm	How to operate Dairy Farm and Process Milk, Dairy Products from Chitralada Dairy Farm	Observe and Personalize	-Activating background knowledge -Note-taking	-Filling in a “ <i>K-W-L chart</i> ” -Completing “ <i>Field notes</i> ” from the field trip to the Chitralada Dairy Farm	-demonstration -knowledge -product -strength -value -dairy
			Search and Retrieve	-Skimming	-Skimming paragraphs from websites www.royalchitralada.or.th www.kanchanapisek.com www.google.co.th	-to donate -to increase -to look after -to improve
			Comprehend and Integrate	-Summarizing short passages	-Vocabulary exercise -Reading passage, “ <i>Dairy Farm Dairy Products</i> ” -Completing a “ <i>Short Passage Summary Organizer</i> ”	
			Communicate to others	-Creating graphic organizer	-Creating a product organizer	

Stage 1.3 Verify the effectiveness of the lesson plans

Concept-Oriented English Reading Instruction lesson plan evaluation forms were constructed and sent to three language-teaching specialists (See Appendix D, p. 130). The lesson plans were verified to ensure construct and content validity.

Three language-teaching specialists validated the lesson plans for Concept-Oriented English Reading Instruction in order to examine the concept of each lesson, objectives, materials, steps of teaching, and activities. The whole evaluation form comprised 12 items that were presented in the form of 4-point numeral Likert-type scales (See Appendix F, p. 157).

4 = Very good

3 = Good

2 = Acceptable

1 = Poor

Experts were asked to rate from 1 to 4 according to the extent to which they agreed with each statement. The evaluation criteria of the validation form were as follows.

4.00 – 3.50 means that the lesson plan was of ‘very good’ quality

3.49 – 2.50 means that the lesson plan was of ‘good’ quality

2.49 – 1.50 means that the lesson plan was of ‘acceptable’ quality

1.49 – 1.00 means that the lesson plan was of ‘low’ quality

Items scoring higher than 3 were reserved and those scoring lower than 3 were modified. The average score of each item is shown in Table 3.2.

Table 3.2

*The validation of Concept-Oriented English Reading Instruction lesson plans**(Overall evaluation)*

Assessment issues	Expert	Expert	Expert	Total	Meaning
	A	B	C		
1. Ideas/concept	4.00	4.00	3.60	3.80	Very good
2. Objectives	3.00	3.00	3.33	3.10	Good
3. Materials and Worksheets	3.33	3.33	3.00	3.20	Good
4. Teaching procedures	3.60	4.00	3.60	3.70	Very good
5. Activities	3.60	3.60	3.33	3.50	Very good
Overall	3.50	3.58	3.42	3.56	Very good

The results from Concept-Oriented English Reading instruction lesson plan evaluation form indicated that the average scores of the lesson plan were between 3.10 and 3.80 and the overall score was 3.56. It implied that the lesson plans contained the majority of relevant characteristics and the overall lesson plans were very good. However, the three experts gave some additional comments for revising the lesson plans. Comments and suggestions from the experts were as follows.

Expert A suggested that the lesson objectives should be more specific and able to be assessed. So the lesson objectives were rewritten more clearly to make it more achievable. The expert also commented that the summary handout in the “*His Majesty the King and his working steps*” unit was too difficult for lower secondary students and that it should provide some prompts for students.

Expert B suggested that the lesson objectives should be more concrete. Additionally, the teacher should provide more activities or exercises to teach

students vocabulary. Accordingly, more activities and supplementary materials were prepared for each lesson.

Expert C commented that the K-W-L Chart in the “*Chitralada Dairy Farm*” unit should be used throughout the whole unit rather than only at the end of the “comprehend and integrate” phase. Additionally, guided questions should be given in the field note handout in this unit for students as well. Furthermore, the unit project should be assigned in the Communicate to others Phase not in the “Comprehend and Integrate” phase to make it more consistent with the objective of the phase.

Whilst the results from the Concept-Oriented English Reading Instruction lesson plan evaluation showed that they contained good characteristics, they were revised in terms of the objectives, materials and activities according to the experts’ suggestions and prepared for the pilot study. Comments from the experts were summed up in Table 3.3.

Table 3.3

Experts’ comments and suggestions on lesson plans

<u>Unit 1: H.M. the King and his working steps</u>	<u>Comments</u>
(Steps of the implementation of the Royal Development Projects)	<ol style="list-style-type: none"> 1. The objectives should be more specific, concrete and able to be assessed. 2. There should be more activities or exercises on vocabulary. 4. The unit project should be assigned in the “Communicate to others” phase. 3. The summary handout is too difficult. Students should be provided with some prompts.

Table 3.3 (Continued)

Experts' comments and suggestions on lesson plans

Unit 2: <u>Monkey Cheek Project</u> (Flood Prevention in Bangkok)	<ol style="list-style-type: none"> 1. The objectives should be more specific, concrete and able to be assessed. 2. There should be more activities or exercises on vocabulary. 3. The unit project should be assigned in the “Communicate to others” phase.
Unit 3: <u>Chitralada Dairy Farm</u> (How to operate Dairy Farm and Process Milk, Dairy Products from Chitralada Dairy Farm)	<ol style="list-style-type: none"> 1. The objectives should be more specific, concrete and able to be assessed. 2. There should be more activities or exercises on vocabulary. 3. The unit project should be assigned in the “Communicate to others” phase. 4. The K-W-L chart should be used throughout the whole unit. 5. Guided questions should be given in the field note handout.

Stage 1.4 Pilot Study

After the revision of the lesson plans, a pilot study was carried out before the main study was undertaken. The pilot study was conducted with 5 lesson plans from the “*His Majesty the King and his working steps*” unit in order to identify potential problems necessary for implementation before the main study and to identify areas where there was a chance that “what could go wrong would go wrong, might happen.”

The pilot study was conducted with 40 students from Grade 8 Room 2 who were studying at Chitralada School in May 2007, semester 1. They shared the

same characteristics in terms of their educational background and their background knowledge on the content of the King's Projects.

Stage 1.5 Revise the lesson plans

The lesson plans were revised based on the information gained from the pilot study. The problem found in the pilot study was that the language used in the materials was too difficult. In addition, the directions did not clearly state the objectives of the tasks. Consequently, some students were not able to follow the directions and always asked the teacher what and why they had to do the tasks. As a result, most directions were changed into more simple English and some explanations of the tasks were also given. For example, in the background knowledge handout the original direction was *“Pose the questions in the column on the right and give the answers that correspond with the questions.”* This direction was too difficult for lower secondary school students and there was no explanation of the task; therefore, the direction was altered to *“This chart helps you draw on what you already know about a subject. Fill in the questions and answer them.”*

Stage 2: Conduct the main study

The duration of the experiment was 10 weeks. Each unit lasted for 2½ weeks with 2 periods per week and each period lasted 50 minutes. The steps in conducting the experiment were as follows.

Stage 2.1 Pretest

Prior to Concept-Oriented English Reading Instruction, all students were pretested with the English reading comprehension test to assess their reading comprehension and to classify students as low or high reading achievers. Reading self-efficacy questionnaire was distributed to the students in order to evaluate their reading self-efficacy.

Stage 2.2 Assign the Instruction

During the experimentation period, in which each unit lasted for 2½ weeks, the students participated in Concept-Oriented English Reading Instruction. They were engaged in the four phases namely observe and personalize, search and retrieve, comprehend and integrate, and communicate to others.

Stage 2.3 Posttest

At the end of the experimentation period, all of the students had to do the posttest. The English reading comprehension test and reading self-efficacy questionnaire were distributed in order to examine the effectiveness of Concept-Oriented English Reading Instruction.

Stage 2.4 Evaluate the effectiveness of the instruction

To evaluate the effectiveness of the instruction, the data obtained from the pre and post English reading comprehension test and reading self-efficacy questionnaire were statistically analyzed by means of arithmetic mean, standard deviation, and dependent t-test in order to compare significant differences of the low and higher achievers' mean scores from both the English reading comprehension test and reading self-efficacy questionnaire before and after the treatment. The data were used to determine whether Concept-Oriented English Reading Instruction enhanced Grade 8 students' reading comprehension ability and reading self-efficacy.

Research Instruments

The instruments used in this study were the English reading comprehension test and reading self-efficacy questionnaire.

The English reading comprehension test

The English reading comprehension test consisted of three sections (See Appendix G, p. 158). Each section contained a passage and 10 multiple-choice questions. There were 30 questions altogether. The time allowed to take the test is 50 minutes. This reading comprehension test aimed to evaluate students' general reading comprehension and to label students as low and high reading achievers. The English reading comprehension test was administered to Grade 8 students twice, in June (pretest) and August (posttest). The items of the test were based on the conceptual theme of "H.M. the king and his work." Based on comprehension strategies taught in this present study, all items of the test measured the general reading comprehension aspects including determining the meaning of words by context, identifying facts in the texts, identifying main ideas, making reference from the content, drawing on background knowledge, drawing inference from the content and evaluating the information. Table 3.4 shows reading constructs and the test items.

Table 3.4

Reading constructs and the test items

Passage	Comprehension strategies	Reading constructs	Item no.
1. Rainmaking Project	-Activating background knowledge	-drawing on background knowledge	2, 4
	-Note-taking	-identifying facts in the text	1,3,8
	-Skimming	-determining the meaning of words by context	5
	-Summarizing	-drawing inference from the content	10
	-Creating graphic organizers	-evaluating the information	7, 9
		-making reference from the content	6
2. Flood Prevention in Bangkok	-Activating background knowledge	-drawing on background knowledge	1
	-Note-taking	-identifying facts in the text	2, 5, 9
	-Skimming	-determining the meaning of words by context	7
	-Summarizing	-identifying main idea	4, 6
	-Creating graphic organizers	-making reference from the content	3, 8, 10

Table 3.4 (Continued)

Reading constructs and the test items

Passage	Comprehension strategies	Reading constructs	Item no.
3. Chitralada Milk Collection Center	-Activating background knowledge	-drawing on background knowledge	10
	-Note-taking	-identifying facts in the text	2, 4, 8
	-Skimming	-determining the meaning of words by context	7
	-Summarizing	-identifying main idea	3, 6
		-drawing inference from the content	1
		-evaluating the information	5
	-Creating graphic organizers	-making reference from the content	9

Validity and reliability of the English reading comprehension test

The content validity of the test items was evaluated by 3 experts in the field of language testing (See Appendix D, p. 130). The experts were asked to rate each item as to whether it was congruent with the objectives and the reading comprehension aspects stated using the evaluation form constructed by the researcher (See Appendix H, p. 162). Then, the Item-Objective Congruence (IOC) Index was calculated by assigning scores to the answers as follows:

Congruent = 1

Questionable = 0

Incongruent = -1

The IOC index ranges from -1 to 1. Items that have an index lower than 0.5 should be revised (Tirakanant, 2003, p.140). The value of IOC for each test item was illustrated in Appendix I (p. 164). Results indicated that 86 % of the items were rated higher than 0.5 of the IOC index, meaning that they were acceptably congruent with the objectives and the reading comprehension aspects. Only 7 items needed alteration. After the consultation with the experts, the items adjusted were as follows:

Item 1: Choices c and d were possible answers. They were changed as follows:

c. He studied about the clouds.



c. He designed the new technique. (modified)

d. He visited the United States



d. He improved the Rainmaking techniques. (modified)

Item 3: Choice d is ambiguous. It was changed as follows:

d. He conducted a survey in Hua Hin.



d. He studied in Hua Hin. (modified)

Item 4: The question is not clear. It was changed as follows.

Why did His Majesty the King do that in Hua Hin?



Why did His Majesty the King set up the Rainmaking Project?

(modified)

Choices b and c are possible answers. They were changed as followed:

b. Because he wanted to fly the aircraft in a variety of weather conditions.

b. Because he wanted to solve drought problem. (modified)

c. Because he wanted to find the best way to produce rain.

c. Because he wanted to fly the aircraft. (modified)

Item 15: The question is not clear. It was changed as follows:

What were the two things needed in Monkey Cheeks Project?

What were the two things needed when Monkey Cheeks Project was first done? (modified)

Item 16: Choices a, b and c are ambiguous. They were changed as followed:

a. It lets the water out.

a. It helps move water onto the streets. (modified)

b. It helps keep water in the area.

b. It helps move water to other provinces. (modified)

d. None of the above.

d. It helps move water into the rice field. (modified)

Item 18: All choices are possible answers. They were changed as follows:

a. To build more watergates



a. To move water into Tha Chin River (modified)

b. To prevent flooding



b. To prevent other provinces from flooding (modified)

c. To have more pumps



c. To move floodwater to other provinces (modified)

d. To continue the project



d. To try to stop heavy rainfall (modified)

Item 23: All choices are possible answers. They were changed as followed:

a. to improve young people's health



a. to promote new products (modified)

b. to help members become stronger



b. to help Thai farmers become stronger (modified)

c. to buy fresh milk from Chitralada Dairy Farm



c. to buy fresh milk and give it to young people (modified)

d. to help members get more money



d. to help Thai farmers to earn more money (modified)

After the alteration, the test was pilot tested with 40 students from Grade 8 Room 2 who were studying at Chitralada School in May 2007, semester 1. After the administration of the test, all test items were analyzed for difficulty index and discrimination index of the test. The reliability of the overall test calculated by Kuder-Richardson-20 formula (KR-20) was 0.92, which can be interpreted that the test had “*high*” reliability. The criteria for the difficulty index and the discrimination index were set as follows (Sukamolson, 1995, p. 31).

For the difficulty index (p):

$p < 0.20$ means the item was difficult.

$p = 0.20-0.80$ means the item was good in terms of its difficulty.

$p = 0.81-0.94$ means the item was easy.

$p \geq 0.95$ means the item was very easy.

For the discrimination index (r):

$r = 0$ means the item had no discrimination ability.

$r \geq 0.19$ means the item had a low discrimination ability.

$r = 0.20-0.29$ means the item had a fair discrimination ability.

$r = 0.30-0.39$ means the item had a high discrimination ability.

$r \geq 0.40$ means the item had a very high discrimination ability.

According to the criteria, the test items of which difficulty indices ranged between 0.20 and 0.80, and discrimination indices were equal or higher than 0.20 were chosen for the main study. All 30 items on the test were satisfactory (See Appendix J, p. 165).

In summary, the overall English reading comprehension test was good. The result obtained from the English reading comprehension evaluation form indicated that item 1, 3, 4, 15, 16, 18, and 23 were needed to be modified. The comments mostly centered on the alternative choices. These items were modified accordingly.

Reading self-efficacy questionnaire

The reading self-efficacy questionnaire referred to Wigfield and Guthrie's reading self-efficacy questionnaire (1995). It was adopted and translated into Thai (See Appendix K, p. 166). The purpose of the reading self-efficacy questionnaire was to examine the reading self-efficacy of Grade 8 students before and after receiving Concept-Oriented English Reading Instruction. A total of 23 items regarding two aspects of reading self-efficacy included reading confidence and reading challenge. Reading confidence comprised 17 items concerning the belief that one can be successful at reading. Additionally, reading challenge consisted of 6 items concerning the satisfaction of mastering or assimilating complex ideas in text. Table 3.5 presented the aspects of reading self-efficacy and the test items. Students took approximately 10 to 15 minutes to complete the questionnaire. All 23 items were presented in the form of 4-point numeral Likert scales. The questionnaire needed to be presented in random order without the categories and numbers to avoid students' confusion (Swan, 2003). Students were told they were going to answer questions about their reading, and that the questions had no right or wrong answers. Students rated from 1 to 4 according to the extent to which they agreed with each statement:

- 4 = Most like me
 3 = More like me
 2 = Somewhat like me
 1 = Not at all like me

Table 3.5

Aspects of reading self-efficacy and the test items

Aspects of reading self-efficacy	Statement items
- reading confidence	1. I know that I will do well in reading this year. 2. I know why I sometimes get low grades in reading. 3. I feel as smart as others in reading. 4. I know how well I have done before I get my paper back. 5. I know how to get good grades in reading if I want to. 6. When I read a story, I am sure that I can create pictures in my mind of the ideas I read. 8. I like to look up words I don't know. 10. When I read a story, I am sure that I can improve my understanding. 11. I need my parents, teachers or more competent peers to help me with my reading homework. 13. In comparison to my other school subjects, I am best at reading.

Table 3.5 (Continued)

Aspects of reading self-efficacy and the test items

Aspects of reading self-efficacy	Statement items
- reading challenge	15. When I read a story, I am sure that I can understand what I read.
	16. I learn more from reading than most students in the class.
	17. When I read a story, I am sure that I can remember what happened in the story.
	19. When I read a story, I am sure that I can tell when I don't understand something.
	20. To do well in reading, I have to get the teacher to like me.
	21. I am a good reader.
	23. I can imagine what's taking place in the story.
	7. I like hard, challenging books.
	9. I like the questions that make me think.
	12. I like a lot of difficult reading.
	14. If a book is interesting, I don't care how hard it is to read.
	18. If the project is interesting, I can read difficult materials.
	22. I usually learn difficult things by reading.

Validity and reliability of reading self-efficacy questionnaire

The content validity of the questionnaire items was evaluated by 3 experts in the field of psychology (See Appendix D, p. 130). The experts were asked to rate each item as to whether it was congruent with the objective using the evaluation form constructed by the researcher (See Appendix L, p.168). Then, the Item-Objective Congruence (IOC) Index was calculated by assigning scores to the answers as follows:

Congruent = 1

Questionable = 0

Incongruent = -1

The IOC index ranges from -1 to 1. Items that had an index lower than 0.5 should be revised (Tirakanant, 2003, p.140). The value of IOC for each item was illustrated in Appendix M (p.171). Results indicated that 19 items were rated higher than 0.5 of the IOC index, meaning that they were acceptably congruent with the objective. Only 4 items needed revision. After the consultation with the experts, the items adjusted were as follows:

Item 1: I know that I will do well in reading this year.

ฉันรู้ว่าปีนี้จะทำได้ดีในวิชาการอ่าน



ฉันรู้ว่าปีนี้จะเรียนวิชาการอ่านภาษาอังกฤษได้ดี (modified)

Item 4: I know how well I have done before I get my paper back.

ฉันมั่นใจว่าจะต้องได้คะแนนดีก่อนที่จะมีการเฉลยข้อสอบ



ฉันมั่นใจว่าฉันทำข้อสอบส่วนการอ่านได้ดี (modified)

Item 5: I know how to get good grades in reading if I want.

ฉันรู้วิธีการทำให้ได้คะแนนดีในวิชาการอ่าน



ฉันรู้วิธีการทำให้ได้คะแนนด้านการอ่านดี (modified)

Item 15: When I read a story, I am sure that I can understand what I read.

ฉันมั่นใจว่าเข้าใจเรื่องที่อ่านทุกครั้ง



ฉันมั่นใจว่าเข้าใจเรื่องที่อ่าน (modified)

Item 18: If the project is interesting, I can read difficult materials.

ฉันสามารถอ่านเรื่องที่ยากได้ถ้าเกี่ยวข้องกับสิ่งที่ฉันสนใจ



ฉันสามารถอ่านเรื่องที่ยากได้ถ้าเรื่องนั้นเกี่ยวข้องกับสิ่งที่ฉันสนใจ (modified)

After the revision, the questionnaire was pilot tested with 40 students from Grade 8 Room 2 who were studying at Chitralada School in May 2007, semester 1. Then, the quality of the questionnaire was assessed by Cronbach's alpha coefficient (α) formula using the SPSS package. The reliability of the questionnaire was 0.83, which can be interpreted that the questionnaire had "high" reliability.

The result obtained from the evaluation form indicated that items 1, 4, 5, 15 and 18 were needed to be modified. The comments mostly centered on the language of some items and the interpretation of each scale which were unclear. The items were improved to make the questionnaire more understandable and easy to rate.

In conclusion, two main instruments of research were used in this study, namely, an English reading comprehension test and a reading self-efficacy questionnaire. Table 3.6 presents a summary of research instruments.

Table 3.6

Summary of research instruments

Instruments	Objectives	Time of distribution	Statistics
English reading comprehension test	1. To assess students' reading comprehension ability 2. To place students in high and low-achievement group	Before and after the treatment	1. Mean (\bar{X}), S.D. 2. Dependent t-test
Reading self-efficacy questionnaire	1. To assess students' reading self-efficacy 2. To compare students' reading self-efficacy mean scores before and after the treatment	Before and after the treatment	1. Mean (\bar{X}), S.D. of each item 2. Dependent t-test

Data Collection

The data collection was carried out in two phases: before and after the experimental study. The whole experiment lasted for 10 weeks. Prior to Concept-Oriented English Reading Instruction, the English reading comprehension test and reading self-efficacy questionnaire were distributed to the students in order to assess Grade 8 students' reading comprehension ability and reading self-efficacy and the scores from the English reading comprehension test were used to place students into two reading achievement levels, low and high reading achievement levels. Before participating in the instruction, the students from Room1 and 3 who were the samples of this present study were given an overview of the course while students from Room

2 participated in the pilot study. They were briefly explained about the content of the King's Project and the activities they may involve during the instruction.

Then, students participated in Concept-Oriented English Reading Instruction for 8 weeks. At the end of the instruction, the students were posttested with the English reading comprehension test and reading self-efficacy questionnaire in order to examine the effects of Concept-Oriented English Reading Instruction on reading comprehension and reading self-efficacy. After the instruction, students were engaged in conventional reading instruction using graded readers.

Table 3.7

Summary of data collection

<p>Before the implementation</p> <ul style="list-style-type: none"> • Lesson plans and research instruments were distributed to the experts. • Suggestions from the experts formed basis for adjusting the lesson plans, the test and the questionnaire. • Students were given an overview of the course.
<p>Week 1: At the beginning of the study, the English reading comprehension test and reading self-efficacy questionnaire were distributed to students.</p>
<p>Week 2-9: Students participated in the lessons for 2½ weeks per one unit (50 minutes per period with two periods per week).</p>
<p>After the implementation</p> <p>Week 10: The English reading comprehension test and reading self-efficacy questionnaire were distributed to students.</p> <ul style="list-style-type: none"> • Students were engaged in conventional reading instruction using graded reader.

Data Analysis

Data analysis for research question 1

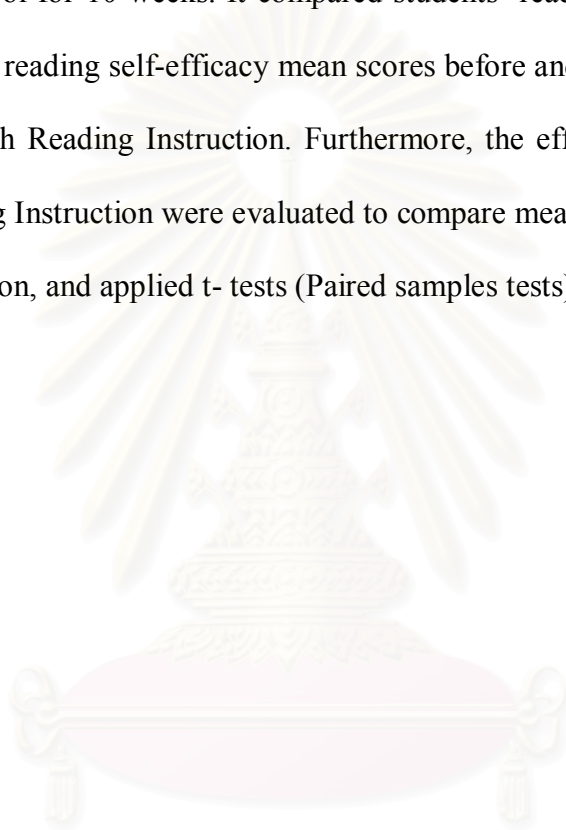
Research question 1 was concerned with the effects of Concept-Oriented English Reading Instruction on the English reading comprehension test's group mean scores of Grade 8 students' with different reading achievement before and after receiving Concept-Oriented English Reading Instruction. The independent variable (IV) was the Concept-Oriented English Reading Instruction. The dependent variable (DV) was the group mean scores on the English reading comprehension test. To analyze the data, a dependent t-test was conducted to determine the differences between the English reading comprehension pretest and posttest mean scores of the students at different reading achievement levels.

Data analysis for research question 2

Research question 2 was concerned with the reading self-efficacy's group mean scores of Grade 8 students' with different reading achievement before and after receiving Concept-Oriented English Reading Instruction. The independent variable (IV) was Concept-Oriented English Reading Instruction. The dependent variable was the mean scores on the reading self-efficacy questionnaire. The arithmetic mean and standard deviation were calculated for each item of the questionnaire. Then, the dependent t-test was also conducted to determine the differences between the reading self-efficacy pretest and posttest mean scores of the students at different reading achievement levels.

Summary

The study aims to examine whether Concept-Oriented English Reading Instruction improves lower secondary school students' reading comprehension and their reading self-efficacy. The research was conducted with 84 Grade 8 students at Chitralada School for 10 weeks. It compared students' reading comprehension mean scores and their reading self-efficacy mean scores before and after receiving Concept-Oriented English Reading Instruction. Furthermore, the effects of Concept-Oriented English Reading Instruction were evaluated to compare means of arithmetic mean and standard deviation, and applied t- tests (Paired samples tests).



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CHAPTER IV

FINDINGS

Basically the study investigates 1) English reading comprehension and 2) reading self-efficacy levels. The chapter is divided into three parts. The first part deals with the effects of Concept-Oriented English Reading Instruction on reading comprehension scores of students at different reading achievement. The second part showed the scores on reading-self efficacy of students at different reading achievement before and after receiving Concept-Oriented English Reading Instruction. The third part added to report findings apart from the research questions.

English Reading Comprehension

The research question one dealt with the effects of Concept-Oriented English Reading Instruction on reading comprehension scores of students with different reading achievement. The data from the pretest and posttest mean scores were analyzed between low reading achievers ($n = 27$, $\bar{X} = 7.90$, S.D. = 1.79) and high reading achievers ($n = 27$, $\bar{X} = 20.14$, S.D. = 2.17). The following questions guided the research study and the hypotheses.

Research question 1: To what extent does Concept-Oriented English Reading Instruction improve reading comprehension scores of lower secondary school students at different reading achievement levels?

Hypothesis 1: The posttest mean scores on English reading comprehension of lower secondary school students at different reading achievement levels are higher than the pretest mean scores at the significance level of .05.

This research question determined whether Concept-Oriented English Reading Instruction improved reading comprehension scores of lower secondary school students at low and high reading achievement. The English reading comprehension test was used to evaluate students' general reading comprehension including determining the meaning of words by context, identifying facts in the texts, identifying main ideas, making reference from the content, drawing on background knowledge, drawing inference from the content, and evaluating the information. Table 4.1 shows the pretest and posttest mean scores, standard deviations, and t-values of the two reading achievement levels.

Table 4.1

Means, standard deviations, t-values, and the significance of the pre English reading comprehension test and the post English reading comprehension test of low and high reading achievers

Levels of reading achievement	N	Mean		S.D.	t.	df.	Sig.
		\bar{X}	Differences				
Low reading achievement	27						
Pretest		7.92	-4.88	3.69	-6.878	26	.000*
Posttest		12.81					
High reading achievement	27						
Pretest		20.14	-3.22	3.06	-5.458	26	.000*
Posttest		23.37					

*P < .05

The results from Table 4.1 showed that the posttest mean scores of the English reading comprehension test of both low reading achievers and high reading achievers were higher than the pretest mean scores. The mean differences were -4.88 for low reading achievers and -3.22 for high reading achievers. The t-values were -6.878 and

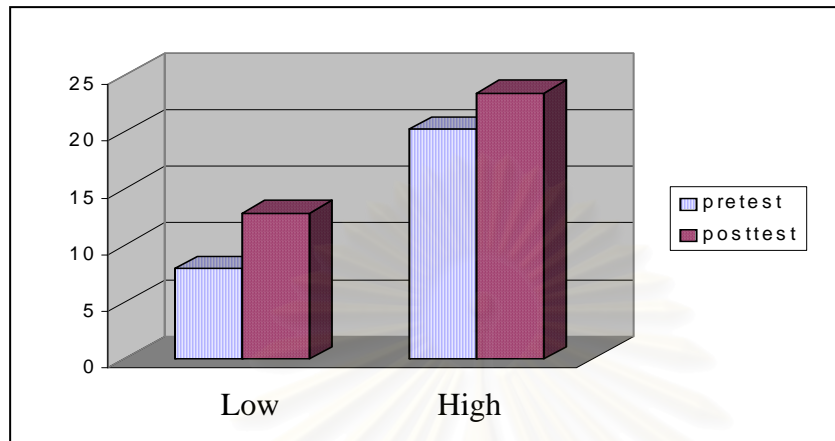
-5.458 respectively with a degree of freedom of 26 ($n = 27$) in each reading achievement level. It is apparent that there were significant differences between the pretest and posttest mean scores of the English reading comprehension test of both low and high reading achievers at a significant level ($p < 0.5$).

In addition to the statistical significance (judged by the p value), research should also report its practical significance in forms of the effect size. Effect size (ES) is a name given to a family of indices that measure the magnitude of a treatment effect (Becker, 2000). In this study, the effect size of Concept-Oriented English Reading Instruction on reading comprehension of students at high reading achievement level was 0.80, which represented the large effect size. Similarly, the effect size of the instruction on reading comprehension of students at low reading achievement level was 0.88, which also represented the large effect size. Therefore, the hypothesis which stated that the posttest mean scores on English reading comprehension of lower secondary school students at different reading achievement levels were higher than the pretest mean scores was accepted.

In sum, students significantly improved their English reading comprehension after receiving Concept-Oriented English Reading Instruction. These findings supported that Concept-Oriented English Reading Instruction is a conceptual knowledge instruction which promotes comprehension. This might be due to the features including knowledge goal, interesting texts, autonomy support, collaboration support, and strategy instruction used in Concept-Oriented English Reading Instruction. These features allowed students to gain conceptual knowledge about the King's Projects, and also strategies necessary in reading such as activating background knowledge, note-taking, skimming, summarizing, and creating graphic organizers.

Figure 4.1

Pretest and posttest mean scores of English reading comprehension of low and high reading achievers



The results of the pretest and posttest mean scores of the two reading achievement levels in Figure 4.1 indicated that the posttest mean score of the low reading achievers ($n = 27$, $\bar{X} = 12.81$, S.D. = 3.71) was higher than the pretest mean score ($\bar{X} = 7.92$, S.D. = 1.79). Similarly, the posttest mean score of the high reading achievers ($n = 27$, $\bar{X} = 23.37$, S.D. = 2.63) was higher than the pretest mean score ($\bar{X} = 20.14$, S.D. = 2.17) as well.

In conclusion, the posttest mean scores from the English reading comprehension test of both low and high reading achievers were higher than the pretest mean scores. It indicates that students improved their reading comprehension after receiving Concept-Oriented English Reading Instruction.

Reading Self-Efficacy

Research question 2: To what extent does Concept-Oriented English Reading Instruction affect reading self-efficacy of lower secondary school students at different reading achievement levels?

Hypothesis 2: The post-test mean scores on reading self-efficacy of lower secondary school students at different reading achievement levels are higher than the pre-test mean scores at the significance level of .05.

The second research question focused on identifying whether the pretest mean scores of the reading self-efficacy questionnaire differed from the posttest mean scores of low and high reading achievers at the significant level of .05. The reading self-efficacy questionnaire was used to investigate the reading self-efficacy of Grade 8 students. A total of 23 items regarding two aspects of reading self-efficacy included reading confidence and reading challenge. Reading efficacy comprised 17 items (items no. 1, 2, 3, 4, 5, 6, 8, 10, 11, 13, 15, 16, 17, 19, 20, 21, and 23) concerning the belief that one can be successful at reading. Reading challenge consisted of 6 items (item no 7, 9, 12, 14, 18, and, 22) concerning the satisfaction of mastering or assimilating complex ideas in text.

To test this hypothesis, the t-test of dependent sample was applied in this study. Table 4.2 presents the mean scores, standard deviations, and t-values of both groups from the reading self-efficacy questionnaire prior to and after receiving Concept-Oriented English Reading Instruction.

Table 4.2

Means, standard deviations, t-values, and the significance of the pre reading self-efficacy questionnaire and the post reading self-efficacy questionnaire of low and high reading achievers

Levels of reading achievement	N	Mean		S.D.	t.	df.	Sig.
		\bar{X}	Differences				
Low reading achievement	27						
Pretest		2.09	-.31	.41	-3.88	26	.001*
Posttest		2.40					
High reading achievement	27						
Pretest		2.15	-.53	.46	-5.93	26	.000*
Posttest		2.68					

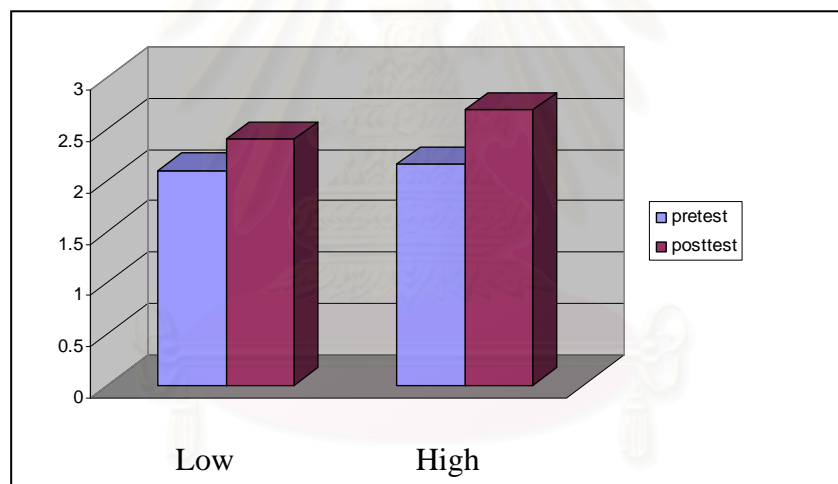
*P<.05

The mean scores from the pre and post reading self-efficacy questionnaire of both low and high reading achievers were compared. It revealed that the posttest mean scores of the reading self-efficacy questionnaire of the low and high reading achievers were higher than the pretest mean scores. The results of the t-test showed that the mean differences were -.31 for low reading achievers and -.53 for high reading achievers. The t-values were -3.88 and -5.93 respectively with a degree of freedom of 26 (n = 27) in each group. In addition, the results from Table 4.2 indicated that there were significant differences between the pretest and posttest mean scores of the reading self-efficacy questionnaire of both low and high reading achievers at a significant level (p < .05). Therefore, the hypothesis which stated that the posttest mean scores on reading self-efficacy of lower secondary school students at different reading achievement would be higher than the pretest mean scores was accepted.

To conclude, students' reading self-efficacy significantly improved after receiving Concept-Oriented English Reading Instruction. The results suggested that the major features including knowledge goal, interesting texts, autonomy support, collaboration support, and strategy instruction used in Concept-Oriented English Reading Instruction provided students with the fundamental tools they needed to read variety of texts and materials, thereby enhancing their reading competence and thus leading to the increase in reading self-efficacy.

Figure 4.2

Pretest and posttest mean scores of reading self-efficacy of low and high reading achievers



From figure 4.2, the mean scores from the pre and post reading self-efficacy questionnaire of students at different reading achievement levels showed that the low reading achievers ($n = 27$) earned a higher posttest mean score ($\bar{X} = 2.40$, S.D. = .48) than a pretest mean score ($\bar{X} = 2.09$, S.D. = .25) on the reading self-efficacy questionnaire. Similarly, the high reading achievers group ($n = 27$) also earned a higher posttest score ($\bar{X} = 2.68$, S.D. = .45) than the pretest mean score ($\bar{X} = 2.15$, S.D. = .38) on the same measure. In other words, it indicated that students improved

their reading self-efficacy after receiving Concept-Oriented English Reading Instruction.

The results of the self-efficacy questionnaire were also analyzed in details to examine the two aspects of reading self-efficacy: reading confidence and reading challenge. Table 4.3 and Table 4.4 show the pretest and posttest item mean scores of the two aspects of reading self-efficacy of low and high reading achievers respectively.

Table 4.3

A comparison of the pretest and posttest mean scores of reading confidence and reading challenge of low reading achievers

Aspects of reading self-efficacy	Pretest		Posttest		t.	Sig.
	\bar{X}	S.D.	\bar{X}	S.D.		
Reading confidence	2.09	.19	2.41	.17	-6.61	.000*
Reading challenge	2.09	.34	2.38	.35	-9.06	.000*
Total	2.09	.25	2.40	.48	-3.88	.001*

*P < .05

The results from Table 4.3 reveal that there were differences between the pre and post mean scores of two aspects of reading self-efficacy at .05 level ($p < .05$). The findings indicated that the means scores on the post reading self-efficacy questionnaire increased in two aspects – reading confidence ($\bar{X} = 2.09$ to 2.41), and reading challenge ($\bar{X} = 2.09$ to 2.38). Results of t-tests were statistically significant at the $\alpha = .05$ level. This means that students at low reading achievement level improved their reading self-efficacy after receiving Concept-Oriented English Reading Instruction.

Table 4.4

A comparison of the pretest and posttest mean scores of reading confidence and reading challenge of high reading achievers

Aspects of reading self-efficacy	Pretest		Posttest		t.	Sig.
	\bar{X}	S.D.	\bar{X}	S.D.		
Reading confidence	2.17	.25	2.69	.11	-11.11	.000*
Reading challenge	2.10	.16	2.64	.09	-6.00	.002*
Total	2.15	.39	2.68	.45	-5.93	.000*

*P < .05

The results from Table 4.4 reveal that there were differences between the pre and post mean scores of two aspects of reading self-efficacy at .05 level ($p < .05$). The findings indicated that the means scores on the post reading self-efficacy questionnaire increased in two aspects – reading confidence ($\bar{X} = 2.17$ to 2.69), and reading challenge ($\bar{X} = 2.10$ to 2.64). Results of t-tests were statistically significant at the $\alpha = .05$ level. This means that students at high reading achievement level improved their reading self-efficacy after receiving Concept-Oriented English Reading Instruction as well.

The two aspects of reading self-efficacy were also analyzed item by item: reading confidence and reading challenge. Table 4.5 and 4.6 present the pretest and posttest mean scores of reading confidence of low and high reading achievers respectively. In addition, Table 4.7 and 4.8 present the pretest and posttest mean scores of reading challenge of low and high reading achievers.

Table 4.5

A comparison of the pretest and posttest item mean scores of reading confidence of low reading achievers

Reading Confidence	Pretest		Posttest		t.	Sig.
	\bar{X}	S.D.	\bar{X}	S.D.		
1. I know that I will do well in reading this year.	2.00	.62	2.59	1.0	-3.04	.005*
2. I know why I sometimes get low grades in reading.	2.00	.62	2.59	1.0	-3.04	.005*
3. Sometimes I feel as smart as others in reading.	2.11	.70	2.70	.91	-2.94	.007*
4. I know how well I have done before I get my paper back.	2.04	.52	2.52	.85	-2.56	.016*
5. I know how to get good grades in reading if I want to.	2.00	.56	2.48	.75	-3.11	.004*
6. When I read a story, I am sure that I can create pictures in my mind.	2.33	.73	2.37	.63	-.23	.814
8. I like to look up words I don't know.	2.48	.70	2.56	.80	-.46	.646
10. When I read a story, I am sure that I can improve my understanding.	2.15	.53	2.48	.64	-2.08	.047*
11. I need my parents, teachers or more competent peers to help me with my reading homework.	2.19	.68	2.37	.79	-1.22	.232

Table 4.5 (Continued)

A comparison of the pretest and posttest item mean scores of reading confidence of low reading achievers

Reading Confidence	Pretest		Posttest		t.	Sig.
	\bar{X}	S.D.	\bar{X}	S.D.		
13. In comparison to my other school subjects, I am best at reading.	1.93	.78	2.19	.68	-1.65	.110
15. When I read a story, I am sure that I can understand what I read.	1.93	.55	2.41	.75	-3.32	.003*
16. I learn more from reading than most students in the class.	2.44	.80	2.56	.75	-.721	.477
17. When I read a story, I am sure that I can remember what happened in the story.	2.33	.68	2.37	.63	-.214	.832
19. When I read a story, I am sure that I can tell when I don't understand something.	1.89	.42	2.26	.53	-.340	.002*
20. To do well in reading, I have to get the teacher to like me.	1.93	.39	2.26	.71	-2.36	.026*
21. I am a good reader.	2.00	.68	2.11	.85	-.681	.502
23. I can imagine what's taking place in the story.	1.89	.51	2.19	.62	-2.53	.018*
Total	2.09	.19	2.41	.17	-6.61	.000*

*P < .05

As shown in Table 4.5, students at low reading achievement level achieved a gain from pre to post reading self-efficacy scores on each item of reading confidence.

The mean scores on the posttest increased in all 17 items of reading confidence:

item 1 ($\bar{X} = 2.00$ to 2.59), item 2 ($\bar{X} = 2.00$ to 2.59), item 3 ($\bar{X} = 2.11$ to 2.70), item 4 ($\bar{X} = 2.04$ to 2.52), item 5 ($\bar{X} = 2.00$ to 2.48), item 6 ($\bar{X} = 2.33$ to 2.37), item 8 ($\bar{X} = 2.48$ to 2.56), item 10 ($\bar{X} = 2.15$ to 2.48), item 11 ($\bar{X} = 2.19$ to 2.37), item 13 ($\bar{X} = 1.93$ to 2.19), item 15 ($\bar{X} = 1.93$ to 2.41), item 16 ($\bar{X} = 2.44$ to 2.56), item 17 ($\bar{X} = 2.33$ to 2.37), item 19 ($\bar{X} = 1.89$ to 2.26), item 20 ($\bar{X} = 1.93$ to 2.26), item 21 ($\bar{X} = 2.00$ to 2.11), and item 23 ($\bar{X} = 1.89$ to 2.19). In addition, the results of the t-test were statistically significant for 10 items including items 1, 2, 3, 4, 5, 10, 15, 19, 20, and 23. On the contrary, only 7 items including items 6, 8, 11, 13, 16, 17, and 21 did not exceed the given value for the .05 level. This means that students at low reading achievement level gained higher scores on these 7 items of reading confidence but not statistically improved.

The overall results of reading confidence, one aspect of reading self-efficacy, clearly shows that there was a significant difference ($P < .05$) in reading confidence of students at low reading achievement level prior to and after receiving Concept-Oriented English Reading Instruction.

Table 4.6 (Continued)

A comparison of the pretest and posttest item mean scores of reading confidence of high reading achievers

Reading Confidence	Pretest		Posttest		t.	Sig.
	\bar{X}	S.D.	\bar{X}	S.D.		
1. I know that I will do well in reading this year.	2.19	.92	2.74	.81	-4.13	.000*
2. I know why sometimes I get low grades in reading.	2.19	.68	2.81	.79	-4.41	.000*
3. I feel as smart as others in reading.	2.00	.88	2.63	.69	-4.41	.000*
4. I know how well I have done before I get my paper back.	1.67	.83	2.48	.80	-5.07	.000*
5. I know how to get good grades in reading if I want to.	1.70	.78	2.56	.85	-4.87	.000*
6. When I read a story, I am sure that I can create pictures in my mind.	2.07	.61	2.85	.77	-5.38	.000*
8. I like to look up words I don't know.	2.30	.60	2.70	.78	-3.38	.025*
10. When I read a story, I am sure that I can improve my understanding.	2.30	.82	2.70	.87	-2.65	.013*
11. I need my parents, teachers or more competent peers to help me with my reading homework.	2.63	.62	2.81	.79	-1.09	.284
13. In comparison to my other school subjects, I am best at reading.	2.07	.62	2.52	.64	-2.72	.011*

Table 4.6 (Continued)

A comparison of the pretest and posttest item mean scores of reading confidence of high reading achievers

Reading Confidence	Pretest		Posttest		t.	Sig.
	\bar{X}	S.D.	\bar{X}	S.D.		
15. When I read a story, I am sure that I can understand what I read.	2.44	.80	2.78	.85	-1.80	.083
16. I learn more from reading than most students in the class.	2.22	.70	2.70	.72	-3.11	.004*
17. When I read a story, I am sure that I can remember what happened in the story.	2.11	.50	2.59	.70	-3.89	.001*
19. When I read a story, I am sure that I can tell when I don't understand something.	2.48	.50	2.74	.71	-1.76	.090
20. To do well in reading, I have to get the teacher to like me.	2.33	.48	2.70	.72	-3.40	.002*
21. I am a good reader.	2.11	.90	2.81	.88	-4.20	.000*
23. I can imagine what's taking place in the story.	2.19	.62	2.74	.71	-5.00	.000*
Total	2.17	.25	2.69	.11	-11.1	.000*

*P < .05

As shown in Table 4.6, students at high reading achievement level achieved a gain from pre to post reading self-efficacy scores on each item of reading confidence.

The mean scores on the posttest increased in all 17 items of reading confidence:

item 1 ($\bar{X} = 2.19$ to 2.74), item 2 ($\bar{X} = 2.19$ to 2.81), item 3 ($\bar{X} = 2.00$ to 2.63), item 4 ($\bar{X} = 1.67$ to 2.48), item 5 ($\bar{X} = 1.70$ to 2.56), item 6 ($\bar{X} = 2.07$ to 2.85), item 8 ($\bar{X} = 2.30$ to 2.70), item 10 ($\bar{X} = 2.30$ to 2.70), item 11 ($\bar{X} = 2.63$ to 2.81), item 13 ($\bar{X} = 2.07$ to 2.52), item 15 ($\bar{X} = 2.44$ to 2.78), item 16 ($\bar{X} = 2.22$ to 2.70), item 17 ($\bar{X} = 2.11$ to 2.59), item 19 ($\bar{X} = 2.48$ to 2.74), item 20 ($\bar{X} = 2.33$ to 2.70), item 21 ($\bar{X} = 2.11$ to 2.81), and item 23 ($\bar{X} = 2.19$ to 2.74). In addition, the results of the t-test were statistically significant for 14 items including items 1, 2, 3, 4, 5, 6, 8, 10, 13, 16, 17, 20, 21, and 23. On the contrary, only 3 items including items 11, 15, and 19 did not exceed the given value for the .05 level. This means that students at high reading achievement level gained higher scores on these 3 items of reading confidence but not statistically improved.

The overall results of reading confidence clearly indicates that there was a significant difference ($P < .05$) in reading confidence of students at high reading achievement level prior to and after receiving Concept-Oriented English Reading Instruction.

Table 4.7

A comparison of the pretest and posttest item mean scores of reading challenge of low reading achievers

Reading Challenge	Pretest		Posttest		t.	Sig.
	\bar{X}	S.D.	\bar{X}	S.D.		
7. I like hard, challenging books.	2.48	.50	2.74	.81	-1.76	.090
9. I like questions that make me think.	2.52	.50	2.89	.75	-2.79	.010*
12. I like a lot of difficult reading.	1.89	.50	2.22	.80	-2.20	.036*
14. If a book is interesting, I don't care how hard it is to read.	1.85	.66	2.15	.72	-2.30	.030*

Table 4.7 (Continued)

A comparison of the pretest and posttest item mean scores of reading challenge of low reading achievers

Reading Challenge	Pretest		Posttest		t.	Sig.
	\bar{X}	S.D.	\bar{X}	S.D.		
18. If the project is interesting, I can read difficult materials.	2.11	.50	2.26	.66	-1.16	.256
22. I learn difficult things by reading.	1.70	.61	2.04	.81	-1.73	.095
Total	2.09	.34	2.38	.35	-9.06	.000*

*P < .05

Table 4.7 illustrates significant differences in another aspect of reading self-efficacy, reading challenge, before and after receiving Concept-Oriented English Reading Instruction. Concerning reading challenge aspect, the mean score on post reading self-efficacy questionnaire of students at low reading achievement level increased in all 6 items – item 7 (\bar{X} = 2.48 to 2.74), item 9 (\bar{X} = 2.52 to 2.89), item 12 (\bar{X} = 1.89 to 2.22), item 14 (\bar{X} = 1.85 to 2.15), item 18 (\bar{X} = 2.11 to 2.26), and item 22 (\bar{X} = 1.70 to 2.19). Results of t-test as indicated in Table 15 shows that the gain was statistically significant for items 9, 12, and 14 at the $\alpha = .05$ level; whereas, there were no statistically significant for items 7, 18, and 22. This implies that students at low reading achievement level gained higher scores on these three items but it was not statistically significant at the $\alpha = .05$ level.

However, the overall results of reading challenge clearly states that there was a significant difference ($P < .05$) in reading challenge of students at low reading achievement level prior to and after receiving Concept-Oriented English Reading Instruction.

Table 4.8

A comparison of the pretest and posttest item mean scores of reading challenge of high reading achievers

Reading Challenge	Pretest		Posttest		t.	Sig.
	\bar{X}	S.D.	\bar{X}	S.D.		
7. I like hard, challenging books.	1.85	.72	2.67	.88	-5.75	.000*
9. I like questions that make me think.	2.19	.68	2.74	.81	-3.09	.005*
12. I like a lot of difficult reading.	2.11	.75	2.67	.68	-2.96	.006*
14. If a book is interesting, I don't care how hard it is to read.	2.30	.67	2.48	.70	-1.72	.096
18. If the project is interesting, I can read difficult materials.	2.19	.56	2.63	.88	-3.07	.005*
22. I learn difficult things by reading.	2.00	.83	2.70	.87	-4.00	.000*
Total	2.10	.16	2.64	.09	-6.00	.002*

*P < .05

As shown in Table 4.8, students at high reading achievement level achieved a gain from pre to post reading self-efficacy scores on each item of reading challenge. The mean scores on the posttest increased in all 6 items of reading challenge – item 7 (\bar{X} = 1.85 to 2.67), item 9 (\bar{X} = 2.19 to 2.74), item 12 (\bar{X} = 2.11 to 2.67), item 14 (\bar{X} = 2.30 to 2.48), item 18 (\bar{X} = 2.19 to 2.63), and item 22 (\bar{X} = 2.00 to 2.70). Results of t-test as indicated in Table 4.8 shows that the gain was statistically significant for items 7, 9, 12, 18, and 22 at the $\alpha = .05$ level; whereas, there were no statistically significant for only item 14. This implies that students at high reading achievement level gained higher scores on item 14 but it was not statistically significant at the $\alpha = .05$ level.

The overall results of reading challenge clearly states that there was a significant difference ($P < .05$) in reading challenge of students at high reading achievement level prior to and after receiving Concept-Oriented English Reading Instruction. In conclusion, students at different reading achievement levels improved their reading self-efficacy in terms of reading confidence and reading challenge after receiving Concept-Oriented English Reading Instruction.

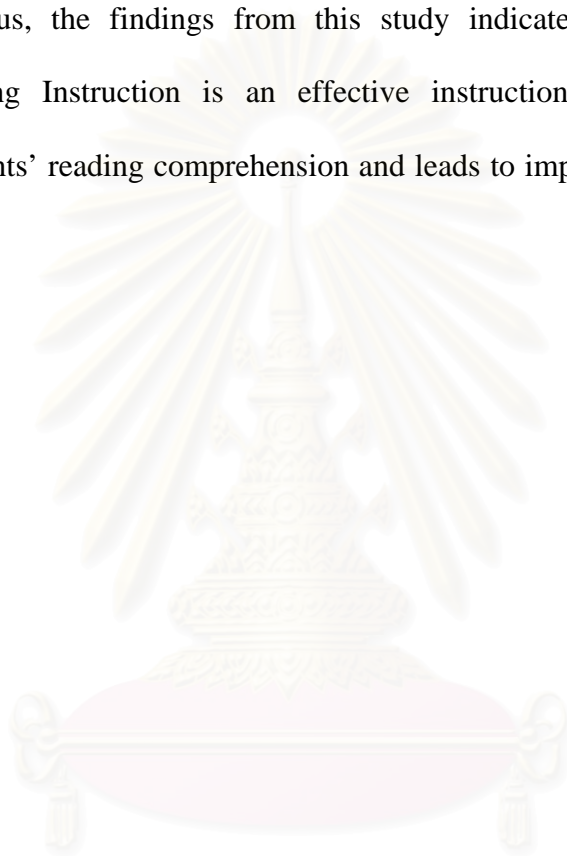
According to the results, two hypotheses were accepted. Lower secondary school students at different reading achievement levels scored higher on the English reading comprehension test and the reading self-efficacy questionnaire after participating in Concept-Oriented English Reading Instruction. It can be concluded that lower secondary school students at low and high reading achievement levels improved both reading comprehension ability and reading self-efficacy after participating in Concept-Oriented English Reading Instruction.

Summary

This chapter presented the findings under two main aspects: English reading comprehension ability and reading self-efficacy and in response to two research questions. The results were statistically analyzed and used to test the hypotheses.

Regarding the effect on English reading comprehension, lower secondary school students at different reading achievement levels earned higher posttest mean scores than pretest mean scores on the English reading comprehension test. The hypothesis which stated that there was significantly higher average score on the post English reading comprehension test than that on the pre English reading comprehension test was accepted.

Considering the effect on reading self-efficacy, hypothesis two which stated that the posttest mean scores on reading self-efficacy of lower secondary students at different reading achievement was significantly higher than the pretest mean score was accepted because both low and high reading achievers showed an improvement on the reading self-efficacy after taking Concept-Oriented English Reading Instruction. Thus, the findings from this study indicated that Concept-Oriented English Reading Instruction is an effective instructional framework that both promotes students' reading comprehension and leads to improvement in reading self-efficacy.



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CHAPTER V

DISCUSSIONS AND RECOMMENDATIONS

This chapter consists of five parts. The first part begins with a brief summary of the study. It reviews the objectives, the research design, and the research methodology. The second part reviews the research findings. The third part discusses the findings. The fourth part suggests the implications drawn from the study. The last part offers recommendations for further studies.

Summary of the study

The objectives of this study were 1) to examine the effects of Concept-Oriented English Reading Instruction on reading comprehension of lower secondary school students at different reading achievement levels; and 2) to investigate the effects of Concept-Oriented English Reading Instruction on reading self-efficacy of lower secondary school students at different reading achievement levels. The research design was a single group design using quantitative research methods. It compared English reading comprehension and reading self-efficacy of students at different reading achievement levels before and after taking Concept-Oriented English Reading Instruction.

This study was divided into two phases. Phase one was concerned with the preparation of Concept-Oriented English Reading Instruction. In this phase, the instruments were developed and pilot tested to ensure its content and construct validity. Phase two dealt with the implementation of the instruction.

Phase 1: The preparation of Concept-Oriented English Reading Instruction

The preparatory process of Concept-Oriented English Reading Instruction was composed of six stages: 1) to specify the population and sample; 2) to explore and study basic concepts and related documents; 3) to construct lesson plans and research instruments; 4) to verify the effectiveness of lesson plans and research instruments; 5) to pilot test the instruction; and 6) to revise lesson plans and research instruments.

Stage one, the population and sample were selected. The population of this study was lower secondary students from private schools in Bangkok. The samples of the main study consisted of 84 Grade 8 students at Chitralada School, during the first semester of Academic Year 2007. The English reading comprehension test was designed and administered to place the students into two levels of reading achievement. Of 30 items on the English reading comprehension test, students whose scores were lower than 10 would be identified as low reading achievers whereas those whose scores were higher than 17 would be classified as high reading achievers. There were 27 students in each group. Meanwhile, of 30 items there were 30 students who scored between 11 to 16 and referred as the moderate reading achievers.

Stage two, the theories and basic concepts related to this study were explored. The studied topics were reading comprehension, components of reading abilities, reading models, Concept-Oriented Reading Instruction (CORI), and reading self-efficacy.

Stage three, the lesson plans and instruments including the English reading comprehension test and reading self-efficacy questionnaire were constructed. The information from the first stage was compiled and became a theoretical framework for

the development of Concept-Oriented English Reading Instruction and research instruments.

Stage four, the checklists were constructed for evaluating the effectiveness of lesson plans and instruments. In order for experts to evaluate, the lesson plans and instruments were revised after being validated by all nine experts.

Stage five, a pilot study was carried out three weeks prior to the main study. The sample in the pilot study consisted of 40 students from Grade 8 Room 2 who were studying at the first semester in academic year 2007.

Stage six, in the pilot study, unit 1: "*His Majesty the King and his working steps*" had been tried out to identify potential problems. In addition, the English reading comprehension test, and reading self-efficacy questionnaire were tested in the pilot study, some of the items were revised for the main study.

Phase 2: The implementation of Concept-Oriented English Reading Instruction

The implementation of Concept-Oriented English Reading Instruction composed of four stages that were 1) to pretest; 2) to assign the instruction; 3) to posttest; and 4) to evaluate the effectiveness of the instruction.

Stage one, prior to Concept-Oriented English Reading Instruction, students were pretested with the English reading comprehension test and reading self-efficacy questionnaire in order to compare their reading comprehension ability and their reading self-efficacy before and after the treatment and the scores from the English reading comprehension test were used to place students in different reading levels of achievement.

Stage two, during the main study, Concept-Oriented English Reading Instruction was taught to lower secondary school students enrolled in an English reading II course for 10 weeks. Each unit lasted for 2½ weeks. There were 3 units with 15 lesson plans. Each lesson lasted for 50 minutes.

Stage three, at the end of the main study, the students had to take the English reading comprehension test and reading self-efficacy questionnaire in order to examine the effectiveness of Concept-Oriented English Reading Instruction.

Stage four, in order to evaluate the effectiveness of the instruction, a t-test was applied to analyze the mean differences of pretest and posttest English reading comprehension and reading self-efficacy scores of the two reading achievement levels. In addition, the additional findings from the moderate reading achievers were also analyzed to determine whether Concept-Oriented English Reading Instruction enhanced Grade 8 students' reading comprehension ability and their reading self-efficacy.

Findings

The findings of the study indicated the effects of Concept-Oriented English Reading Instruction. The findings were divided into two aspects 1) English reading comprehension; and 2) reading self-efficacy.

English reading comprehension

In response to research question one, the posttest mean scores of the English reading comprehension test of both low and high reading achievers were significantly higher than the pretest mean scores at the .05 level. Hence, Concept-Oriented English

Reading Instruction significantly improved Grade 8 students' reading comprehension. In other words, Grade 8 students at different reading achievement levels improved their English reading comprehension after receiving Concept-Oriented English Reading Instruction.

Reading self-efficacy

In response to research question two, the posttest mean scores of the reading self-efficacy questionnaire of both low and high reading achievers were significantly higher than the pretest mean scores at the .05 level. In other words, Grade 8 students at different reading achievement improved their reading self-efficacy after receiving Concept-Oriented English Reading Instruction.

In summary, the two hypotheses were accepted. There were significantly higher average scores on the post English reading comprehension test and the post reading self-efficacy questionnaire than on the pre English reading comprehension test and the pre reading self-efficacy questionnaire. Therefore, it can be concluded that Concept-Oriented English Reading Instruction enhanced students' English reading comprehension ability and reading self-efficacy.

Discussions

After Concept-Oriented English Reading Instruction was conducted, the instructional effectiveness was found. The findings were discussed on two aspects: English reading comprehension and reading self-efficacy.

1. English reading comprehension

Based on the finding from the paired sample t-test, the mean scores on the post English reading comprehension test of Grade 8 students at different reading achievement levels were higher than their pretest mean scores. This revealed that Concept-Oriented English Reading Instruction significantly led to improvement in reading comprehension of the lower secondary school students at different reading achievement levels. The findings were discussed on two aspects: the reading achievement levels and reading comprehension strategies.

1.1 The reading achievement levels

In a hypothesis test examining the effects of Concept-Oriented English Reading Instruction on students at low and high reading achievement levels, it was found that the significant difference between the pretest and posttest mean scores on reading comprehension were at the .05 level ($P < .05$). Concept-Oriented English Reading Instruction significantly improved the reading comprehension of both low and high reading achievers at the .05 level.

In this study, the students at different reading achievement levels were explicitly taught a particular strategy in every unit. For example, students in Concept-Oriented English Reading Instruction were provided with instruction in activating background knowledge, note-taking, skimming, summarizing, and creating graphic organizers for 8 weeks. By the end of that time, students, especially low reading achievers may gain competence in using such strategies to help them comprehend better.

This finding was consistent with the major goal of Concept-Oriented English Reading Instruction that the repetitive and explicit strategy instruction are intended to accommodate all types and categories of students, especially students at

low reading achievement level (Swan, 2003). Additionally, this finding was also consistent with the research finding on Concept-Oriented Reading Instruction. They showed that struggling readers in Grade 7 need multiple opportunities to learn a particular strategy. In one or two trial runs, they are unlikely to gain command of a strategy (Guthrie, 2004). In Guthrie's study, struggling readers were provided with instruction in summarizing for three consecutive units. By the end of the third unit, the lower reading achievement level had gained competence in writing short summaries of a single page of the book and an increase in reading comprehension.

The building of conceptual knowledge or a conceptual theme may explain why low reading achievers improved their reading comprehension scores. In the present study low reading achievers read texts addressing the topic of the conceptual theme about His Majesty the King and the royal projects during text interaction in "Search and retrieve" and "Comprehend and integrate" phases. This finding was consistent with the study of Guthrie and others (2004). In his study, it was found that texts used during instruction with struggling readers should also address the topic of the conceptual theme as frequently as possible. This study is also consistent with what Davis and Tonks (2003) suggested in their study that using an abundance of texts related to the conceptual theme for reading instruction, especially with low reading achievers is considered effective in enhancing these struggling readers' reading comprehension.

Regarding students at high reading achievement level, good readers read quickly and sometimes liked to work independently (Morgan, 2001). In this study, students were allowed to work both in pairs and individually during the strategy instruction. Therefore, the class activities and format might interest high reading achievers and thus improve their reading comprehension.

Additionally, various research studies in reading instruction suggest that students at high reading achievement level who were asked to explain a text that they read showed an improvement in their overall reading comprehension (Campbell, 2006). This might be due to the fact that high reading achievers like to connect ideas from various texts and present their knowledge in several forms (Swan, 2003). In Concept-Oriented English Reading Instruction, students were asked to create various types of graphic organizers including concept mapping, non-fiction organizer, and process notes under the conceptual theme of the King's Projects and present them to others. The effect of creating graphic organizers was reflected in the higher scores on the post reading comprehension test of high reading achievers.

These findings were also consistent with the study of Guthrie and others (2004). The finding from their study suggested that graphic organizers work well with high-proficiency students and help them understand things conceptually by enabling them to connect concepts together and better perceive the relationships among concepts. Graphic organizers also help high reading achievers do better on achievement tests because students can remember what the map looks like in their minds. In conclusion, when considering reading achievement levels, it implied that Concept-Oriented English Reading Instruction specifically improved reading comprehension of both low and high reading achievers.

1.2 Comprehension strategies

One of the most important issues in EFL reading instruction is the development of comprehension strategy (Grabe & Stoller, 2002). In this study, one of the major principles of Concept-Oriented English Reading Instruction focused on teaching reading comprehension strategies. Guthrie and others (2007) suggested that comprehension strategy should be integrated into the development of Concept-

Oriented Reading Instruction since competence in comprehension strategy is the first quality students need to become competent readers.

Students in Concept-Oriented English Reading Instruction were taught various strategies including activating background knowledge, note-taking, skimming, summarizing, and creating graphic organizers. These comprehension strategies were necessary tools that helped students comprehend texts better. This finding is supported by the suggestion from Pressley (2006) that comprehension strategies have potential to enhance reading comprehension if they are explicitly modeled and explained, and are then followed by scaffolded practice and independent practices. In Concept-Oriented English Reading Instruction, comprehension strategies were introduced and presented in four teaching procedures including modeling and demonstration, scaffolding, partner practice, and independent practice. When students were taught through direct and explicit strategy instruction with these four teaching procedures, they were provided with tools needed for better reading comprehension.

To conclude, students may promote their comprehension of concept-oriented texts due to the fact that they are able to apply appropriate reading strategies to read meaningful and interesting contents; for example, using background knowledge to read local materials, using note-taking and skimming strategies to search for related information, using summarizing strategy to help get the main ideas of the texts, and creating graphic organizers to connect ideas from various sources.

2. Reading self-efficacy

Based on the finding from the paired sample t-test, the mean scores on the post reading self-efficacy questionnaire of Grade 8 students at different reading achievement levels were higher than their pretest mean scores. This revealed that

Concept-Oriented English Reading Instruction significantly improved the reading self-efficacy of lower secondary school students at different reading achievement levels. In this study, the improvement in reading self-efficacy could be discussed in two aspects: reading confidence and reading challenge.

2.1 Reading confidence

Characteristics and attributes of self-efficacy in reading included beliefs about their capabilities while reading a variety of texts showing preferences for reading challenging books, and building confidence in their reading. In Concept-Oriented English Reading Instruction, students reported the improvement of their reading self-efficacy after participating in the instruction. This means that their confidence in reading increased as well. Such confidence in reading improved because students had a chance to watch and collaborate with their peers in doing the activity, such as practicing comprehension strategies like skimming and summarizing, with their partners, and worked as a team to create diverse forms of graphic organizers. This helped the students think they could do the activity, too (Wigfield & Tonks, 2003).

To conclude, when students feel that they can read as efficiently as their peers, their reading self-efficacy or reading confidence tends to increase as well. This is particularly likely to happen when the students have an opportunity to seek assistance from texts, teachers, or peers during the four phases of Concept-Oriented English Reading Instruction. If students read with their peers in order to construct hands-on activities, they may believe that they could be successful in doing activities, leading to the belief in reading self-efficacy.

2.2 Reading challenge

Preference for challenge refers to the desire to read relatively difficult or challenging texts (Wigfield & Tonks, 2003). Students who prefer to take on challenges in reading are likely confident in their reading and perceive themselves as efficacious readers. In Concept-Oriented English Reading Instruction, students were exposed to complex information about His Majesty the King and the royal projects, such as the Monkey Cheek Projects, the Chitralada Dairy Farm, and other royal development projects. In consequence, the recognition that learning occurred in that students initiated efforts to explore difficult texts like unabridged informational texts from authentic sources such as websites or brochures. When reading challenging texts was worth the effort, and partly from the appropriate matching of increasing student knowledge of a topic, it could lead to the preference for challenges in reading.

In conclusion, the increase in reading self-efficacy in terms of reading challenge of the students in this study is supported by considerable research. It has found that reading self-efficacy and reading confidence arise in part from the recognition that reading is indeed occurring and that the reading of sophisticated and challenging information justifies the effort.

It is possible that after receiving Concept-Oriented English Reading Instruction, Grade 8 students increased their reading self-efficacy in terms of reading confidence and reading challenge because of some principles underlying the instruction. Those underlying principles include student collaboration and opportunity to expose to complex texts of their interests and relevance to their lives.

To sum up, major principles of Concept-Oriented English Reading Instruction such as using conceptual themes, providing students with comprehension strategy instruction and creating graphic organizers have a great positive effect on

lower secondary school students' English reading comprehension as they are the basis of teaching students how to make sense of their reading. Concerning students' reading self-efficacy, the aspects of reading confidence and reading challenge help improve their sense of efficacy in reading. This is due to the fact that collaboration and challenging informational texts enhance their reading self-efficacy.

Pedagogical Implications

The findings suggested a promising Concept-Oriented English Reading Instruction for reading instruction that can foster English reading comprehension and reading self-efficacy for lower secondary school students.

Firstly, teachers should focus more on the integration of the content-oriented and language instruction. Teachers should select topics related to their students' interests, whereby students can expand their language proficiency into content areas of personal interest. By focusing on areas of interest to the students and providing them various interesting texts, students do not become overwhelmed with both language and content. In addition, when students are interested in what they read, they process the information more deeply, gain richer conceptual understandings, and engage more fully in the text; therefore leading to an improvement in comprehension (Brozo, Shiel & Topping, 2007).

It is also important for EFL reading teachers to use an abundance of diverse and interesting texts in content domains for reading instruction. This is due to the fact that in EFL contexts, students tend to read quite simple texts that do not match their interests. In addition, they are also less likely to be exposed to the diversity of interesting texts that are commonly read by L1 students. Hence, reading EFL teachers

should put a great emphasis on selecting authentic and interesting texts that are relevant to students' lives and interests (Brinton, 2003).

The second implication deals with the implementation of Concept-Oriented English Reading Instruction. In relation to student activities, teachers should design hands-on activities which give them an opportunity to collaborate with their peers. In reading EFL instruction, students often lack an opportunity to be exposed to real-world activities leading to a meaningless language learning context (Grabe & Stoller, 2002). These meaningless reading activities might interfere with EFL students' reading comprehension. Guthrie and others (2004) recommended that the hands-on activities may facilitate students to better understand informational texts. Furthermore, for a substantial number of students, especially low reading achievers, these concrete experiences are vital for comprehending the texts (Hidi & Harackiewicz, 2000).

Thirdly, the findings of this investigation suggest that long-term strategy instruction was effective. In other words, students need to know how to learn as well as what to learn. Reading strategies should be taught explicitly by naming the strategy and telling students what the strategy does to assist reading. When students feel familiar with a variety of strategies, they can then select the one they have found to be most appropriate for the specific reading texts.

Fourthly, it is suggested that a language teacher should promote more local resource learning because it tends to be meaningful and familiar to students' lives. Having been part of the local people, students could find that the materials were somehow relevant and meaningful to their lives (Epstein & Ormiston, 2007). Thus, using the community contact materials may offer EFL students a range of interesting texts that lead to better reading comprehension and self-efficacy.

Finally, it is suggested that sometimes simple texts alone do not challenge students enough. Teachers should also introduce students to some complex and challenging informational texts or topics so that they may recognize that reading is worth the effort. However, teachers should be aware that such a complex and challenging text must also be connected to students' own experiences.

Recommendations

This study serves as one of the research studies that explore the area of instruction for reading English as a foreign language. It established a new reading framework to enhance students' reading comprehension, and reading self-efficacy. The findings from this study generated some recommendations for teachers and for further study.

Recommendations for teachers

Firstly, it is recommended that teachers should use a lot of interesting texts. Teachers should realize that there are trade books and other resources at the students' level of difficulty. They should keep in mind that the reading level must be low enough so students can use them independently or with peer support. Some texts must be provided to challenge the higher readers as well. Irrespective of the students' reading levels, the texts (whether paper or electronic) must be conceptually informative.

Secondly, teachers should plan for collaboration support. By forming teams based on a similar interest, the teacher can help students read extensively. Furthermore, when students work collaboratively with friends, they enjoy the

interpersonal interaction. When it is successful, collaborating is intrinsically motivating and this leads to an improvement in reading self-efficacy.

Lastly, teachers should also put a greater emphasis on explicit comprehension strategy instruction, especially when they teach lower reading achievers (Gaskins & Elliot, 1991). This is due to the fact that these strategies will become powerful tools for students to become proficient in comprehension.

Recommendations for further studies

Firstly, it is recommended that future research should extend to investigate a broader sample of students to gain better understanding of the effect of Concept-Oriented English Reading Instruction. In other words, different studies, employing the same methodology, should be conducted. Since the findings from the present study are relevant to its own context, it is interesting to achieve transferability by conducting further studies in other contexts, with local resources or with other participants.

Secondly, it is recommended that other kinds of qualitative instruments such as classroom observations, learning logs, self-reporting, and teacher rating, should be included in future studies. These instruments are needed to allow a more in-depth study.

Finally, researchers should continue to explore other dependent variables. For example, research might explore whether Concept-Oriented English Reading Instruction improves the use of comprehension strategies.

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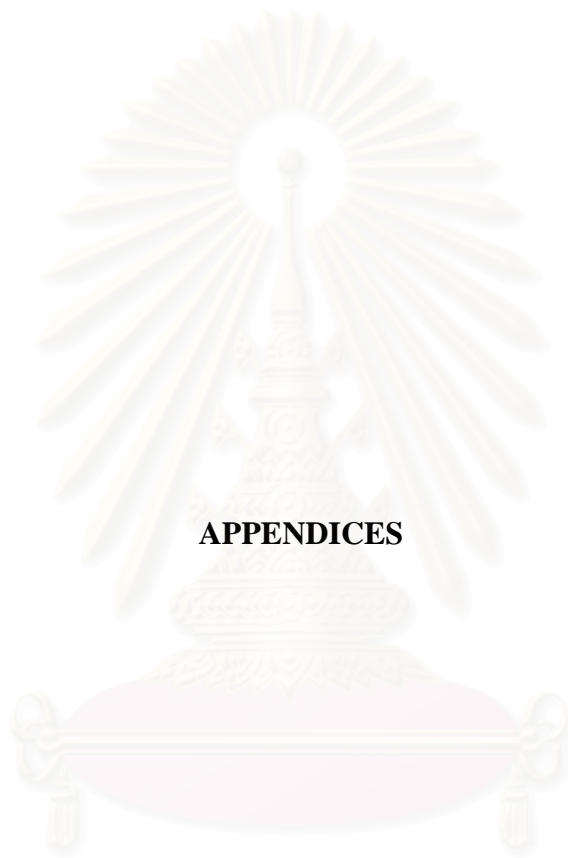
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APPENDICES

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

Appendix A

Frequency of the Pretest Score Distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4.00	1	1.2	1.2	1.2
	5.00	3	3.6	3.6	4.8
	6.00	2	2.4	2.4	7.1
	7.00	3	3.6	3.6	10.7
	8.00	6	7.7	7.7	17.9
	9.00	6	7.7	7.7	25.0
30th PR	10.00	6	7.7	7.7	32.1
	11.00	6	7.7	7.7	39.3
	12.00	5	6.0	6.0	45.2
	13.00	8	9.5	9.5	54.8
	14.00	7	8.3	8.3	63.1
	15.00	2	2.4	2.4	65.5
	16.00	2	2.4	2.4	67.9
70th PR	17.00	5	6.0	6.0	73.8
	18.00	2	2.4	2.4	76.2
	19.00	2	2.4	2.4	78.6
	20.00	6	7.1	7.1	85.7
	21.00	4	4.8	4.8	90.5
	22.00	6	7.1	7.1	97.6
	24.00	1	1.2	1.2	98.8
	25.00	1	1.2	1.2	100.0
	Total	84	100.0	100.0	

Appendix C

Results from the needs survey questionnaire

Topics	Total scores	N	\bar{X}	S.D.	Rank
Chitralada Dairy Farm*	4	129	3.44	.77	2
Rain-making operations	4	129	2.93	1.11	
Rice Production and Processing	4	129	3.09	1.01	
Chitralada Juice Production	4	129	3.25	.99	
The King and his working steps*	4	129	3.25	.96	3
Conservation of Soil	4	129	3.11	1.02	
Reforestation	4	129	3.04	1.06	
Monkey Cheek Project*	4	129	3.52	.75	1
Musical Composition	4	129	2.77	1.10	
Waste Water Treatment	4	129	3.17	.96	
Fisheries	4	129	2.82	1.04	
Chaipattana Aerator	4	129	3.13	1.07	
The King and his study centres	4	129	3.10	.97	
Organic Fertilizer	4	129	2.57	1.17	
Green Fuel	4	129	2.96	.96	

Appendix D

List of experts validating the instruments

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A. Experts validating lesson plans

1. Jutarat Vibulphol, Ph.D.
Faculty of Education, Chulalongkorn University
2. Songsorn Svasti, Ph.D.
Principal, Songwithaya School
3. Chanawat Bunnag, Ed.D.
Chitralada School

B. Experts validating English reading comprehension test

1. Assoc. Prof. Kusumal Rachatanun
Special Lecturer, Faculty of Arts, Chulalongkorn University
2. Assist. Prof. Sarat Boonyaratpan
Faculty of Humanities, Siam University
3. Mr. David Brooks
Faculty of Education, Chulalongkorn University

C. Experts validating reading self-efficacy questionnaire

1. Assist. Prof. Duangkamol Trivijitkhun, Ph.D.
Faculty of Education, Chulalongkorn University
2. Assoc. Prof. Prajit Apinainurak
Faculty of Education, Srinakharinwirot University
3. Assist. Prof. Daranee Saksiriphon, Ph.D.
Faculty of Education, Srinakharinwirot University

Appendix E

Sample Lesson Plans

Conceptual Theme: H.M. the King and his work

Topic	Unit 1 The King and his working steps
Subject	English Reading II
Level	Grade 8
Vocabulary Focus	Work-related terms
Unit Objectives	Students should be able to identify the King's working steps in different Royal Projects.
Evaluation	Students complete a background knowledge handout. Students complete a key word note. Students create the group's concept map.

Phase	Observe and Personalize
Lesson	1.1 (50 minutes)
Cognitive Strategy	Comprehension Strategy (Activating background knowledge: Background Knowledge Handout)
Lesson Objectives	After finishing the lesson, <ol style="list-style-type: none"> 1. Students should be able to give their opinions concerning the King and his benevolences to Thai people. 2. Students should be able to use their background knowledge in order to generate interest and make new information more meaningful.



Procedures

1. Modeling and Demonstrating (10 minutes)

- Class, what do you do before you read? (Teacher makes a list of students' idea on the board.)

- Well, class, look at this picture. Do you know who he is? (His Majesty the King Bhumibol; King Rama IX) What is he doing in this picture? (He is visiting Thai people. / He is talking to Thai farmers.)



- What I do here is that I ask you questions to activate your background knowledge. Before studying or reading about His Majesty the King and his working steps, we are going to talk about an important reading strategy that can help you read better. This strategy is called activating background knowledge. We normally activate our background knowledge before we read so that we will understand better when we read.

2. Scaffolding (10 minutes)

- Activating background knowledge is very important in reading because it can help you understand the text more clearly and quickly.

- Before you start reading about His Majesty the King and his working steps, I would like you to check what you know about His Majesty the King and how he works on his project. Take a few minutes to look at these pictures. Can you think of

any questions to ask about these two pictures? (What is His Majesty the King doing? / Why is His Majesty the King using the computer? / Where is His Majesty the King?)



- Then, I would like you to answer your own questions. (He is visiting local areas. / He is looking at the map. / He is searching for information. / He is in the office.)

- Now, your answers to the questions are your background knowledge. You will see that your background knowledge is different and not equal depending on your experiences.

3. Partner Practice (15 minutes)

- The statements you have said are some of the facts about His Majesty the King. Now, with your classmates, I would like you to ask more questions about the King and his work. (Students discuss with a partner and write the question on the sentence strip. After that teacher reads each question aloud and sticks it on the future board for display.-Who helps His Majesty the King when he works? / Where does he get the money from? / Why does he have to visit many provinces?)

- Then, with your partner, I would like you to answer these questions. (Students discuss with a partner and write the answers on another sentence strip. After that teacher reads each answer aloud and sticks it next to each question. - His Majesty the King always works with other people. / He always gives money to the project. /

He always plans before he works. / He studies before he starts working. / He wants to get more information.)

4. Independent Practice (15 minutes)

- As you have already practiced asking questions and stating your background knowledge with your partner, now I would like each of you to practice this strategy individually. This is because eventually this strategy will become automatic skill.

- In the background knowledge handout, I would like you to write your own questions and then answer them. (Students work individually and write in the background knowledge handout.)

(What does His Majesty the King do when he visits other areas? / He talks to people.)

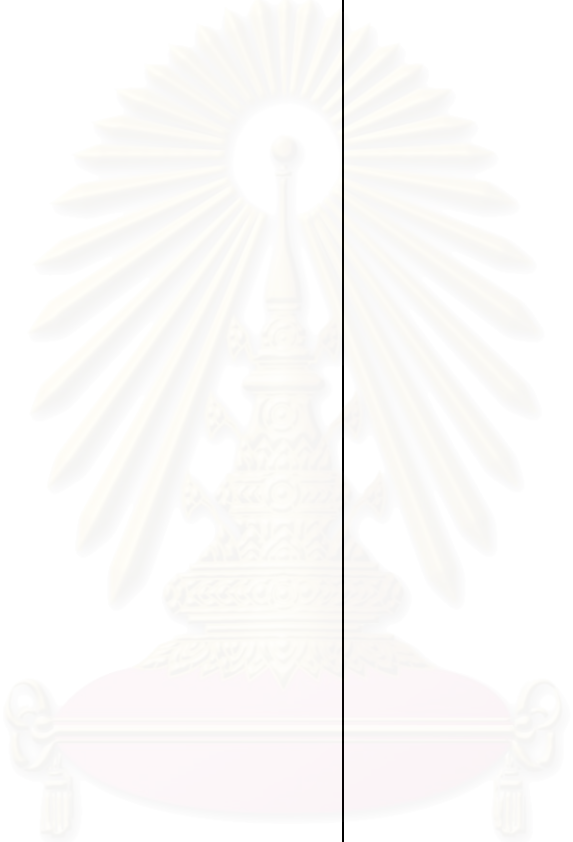
- You will see that your background knowledge is different and not equal depending on your experience.



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Background Knowledge Handout

This chart helps you draw on what you already know about a subject. Fill in the questions and answer them.

My questions	My answers
	

My background knowledge:

.....

.....

.....

.....

.....

Phase: Observe and Personalize

Lesson 1.2 (50 minutes)

Cognitive Strategy Comprehension Strategy (Note-taking: Key word note)

Lesson Objectives After finishing the lesson,

1. Students should be able to record information from a video on a chart

2. Students should be able to describe the King's five working steps after watching a video.

Procedures

1. Modeling and Demonstrating (15 minutes)

- Class, today I'm going to show you the video about the Royal Chitralada Project. You will have a good chance to watch the actual projects set up by His Majesty the King. You will also have a chance to listen to our guest speaker who is now working as the director of the Center. But before we watch the video, can you tell me what you should do when there is a speaker speaking about information you have never learned before. (Teacher makes a list of students' ideas on the board.)



- Now, I would like all of you to look at this picture. What is Princess Sirindhorn doing when she listens to the official giving her report? (She is writing. / She is taking notes.)

- Here is my note after I have listened to the video talking about His Majesty the King's Chaipattana Aerator. (Teacher sticks the note on the board.)

Key words	Notes from the lecture
His Majesty the King Chaipattana Aerator In 2000 (The Aerator) Price Advantage	The Father of Thai Invention / Invented Chaipattana Aerator Help add oxygen to water Received he awards at an international exhibition in Belgium Inexpensive technology Good for environment and farmers

2. Scaffolding (10 minutes)

- Note-taking can help you remember key facts and details from a reading or a listening so that you can answer the questions that you want to know. It can help you think through important information until you truly understand it. Note-taking is not difficult because you just write down key words and important facts or comments.

- Before you watch the video, I would like you to listen to me. I am going to read about His Majesty the King and one of his projects. While I am reading, I would like you to take notes on the key word notes handout. You will have to write down important facts you hear for each key words in the right hand column. (Sample answers)

Key words	Notes from the lecture
Name of the project	<i>The Royal Development Projects</i>
Aim of the project	<i>To solve immediate problems</i>
Place	<i>Buri Ram Province</i>
Problem	<i>Underdeveloped area and under communist control</i>
Other immediate problems	<i>Traffic congestion and flooding</i>

“The Royal Development Projects are set up with the aim of solving the immediate problems in many provinces. The first project which focuses on solving the immediate problems was done in Buri Ram Province in the northeastern part of Thailand. This is because the area was underdeveloped and also under communist control. Nowadays, the Royal Development Projects focus on the two immediate problems such as traffic congestion and flooding in Bangkok.”

3. Partner Practice (10 minutes)

- Now, with your partner, I would like you to compare your key word note and see if there is anything different. I will read the script again and then you and your partner will have to fill in the key word note hand out together. (Students discuss with a partner and write in the handout.)

4. Independent Practice (15 minutes)

- Well, it's time to watch the video. I would like you to fill in the key word note handout while you are listening to video talking about His Majesty the King and one of his projects. (Students work individually and write in the handout.)

Key words	Notes from the lecture
Name of the project	
Aim of the project	
1955	
Five steps of Rainmaking Project	
His Majesty the King	

“His Majesty the King realized the importance of seasonal rainfall on the lives of Thai people. From his travels to meet people in all parts of the country, His Majesty found that dry season had caused problems among Thai farmers. In order to solve this drought problem, His Majesty the King began the Rainmaking Project in 1955. He first studied from the book that the rainmaking technique is possible so he spent his time studying the technique. After that His Majesty went to many provinces to collect more information and interview local people. Then, His Majesty and officers from the Royal Rain-Making Operation Office planned the target area and His Majesty donated some money from his purse to support the project. Later, he started the project as he had planned before and finally, the project was evaluated and the result showed that the project worked successfully. Today, His Majesty the King is also known as “The Father of the Royal Rainmaking”.

Source: Introduction to the Royal Rainmaking (A lecture given by

- Teacher then checks answers with students.

Phase: Search and Retrieve

Lesson 1.3 (50 minutes)

Cognitive Strategy Comprehension Strategy (Skimming for specific information)

Lesson Objectives After finishing the lesson,

1. Students should be able to use the reading process for websites.
2. Students should be able to select a related topic and information concerning His Majesty the King and how he works.

Procedures

1. Modeling and Demonstrating (15 minutes)

Students will have the lesson in the computer room.

- Class, when you are going to write a report, what would you do? (I am going to search for more information.)

- Good. Searching for and finding information is another important activity that gives you a chance to read several texts. It can also help you to gain information you need when you write a report.

- Can you tell me what the woman in the picture is doing? (She is using the computer. / She is using the internet.)



- The woman in the picture is using the internet. Why is she using the internet? (She is searching for information.)

- Reading a website is very different from reading a chapter in a book. When you read a book, you go in one direction, from left to right and from beginning to end.

But when you read a website, you can go in any number of directions and it's easy to get lost. Thus, it is very important for you to have a clear purpose for reading. When reading a website, ask yourself "What questions do I have?"

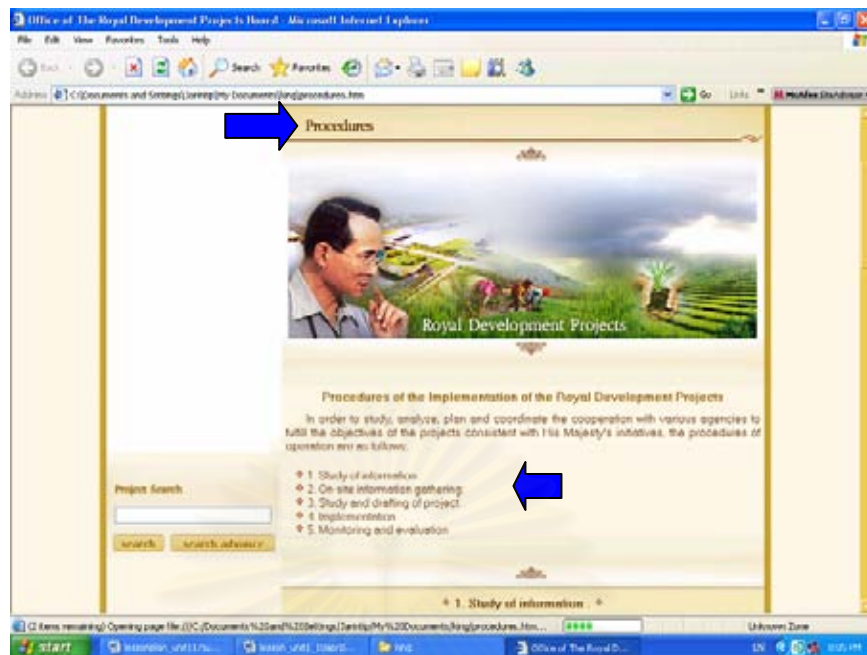
- Those questions work as guidelines when you read. And finding the answers to your questions becomes your purpose for reading. For example, my question is "Why does His Majesty the King have to visit many provinces?" This question is my purpose of reading and I will try to find the answer to that question. (Teacher writes the question on the board.)

- Well, do you think I have to read everything on a website? (No)

- That's right. I just skim for the specific information I need. Skimming is a very important strategy that works well when you are reading to find one specific bit of information.

- Now, let me show you how I use skimming for specific information strategy to find information for my question. Class, I would like you to go to this website www.60thcelebrations.com .

- Look at my question on the board. My question is "Why does His Majesty the King have to visit many provinces?" I would like to answer this question so I visit the official website about the king. Firstly, I will check the topic and make sure it relates to the information I need.



- Then, I look for the specific detail I need. Here I can find the answer to my question. His Majesty the King visit many provinces to collect more information for facts and the latest data.



2. Scaffolding (10 minutes)

- Skimming helps you locate essential information in the website. When you skim, you don't read each word or sentence carefully. If you see that a page doesn't contain the information you need, move on. With skimming, you first read for topics to help locate the general subject you need. Later, concentrate on the specific details you need to find.

- Now, I will choose one question from the list here. (Teacher chooses a question and writes it on the board.) (Sample question: Why does His Majesty the King always talk to local people?)

- Alright, I would like you to find more information so that you can answer this question. Now, with the same website please find the answer to the question. (Students work with their partner to find the answer by following the teacher step by step.) (Sample answer: He interviews local people to get more information.)

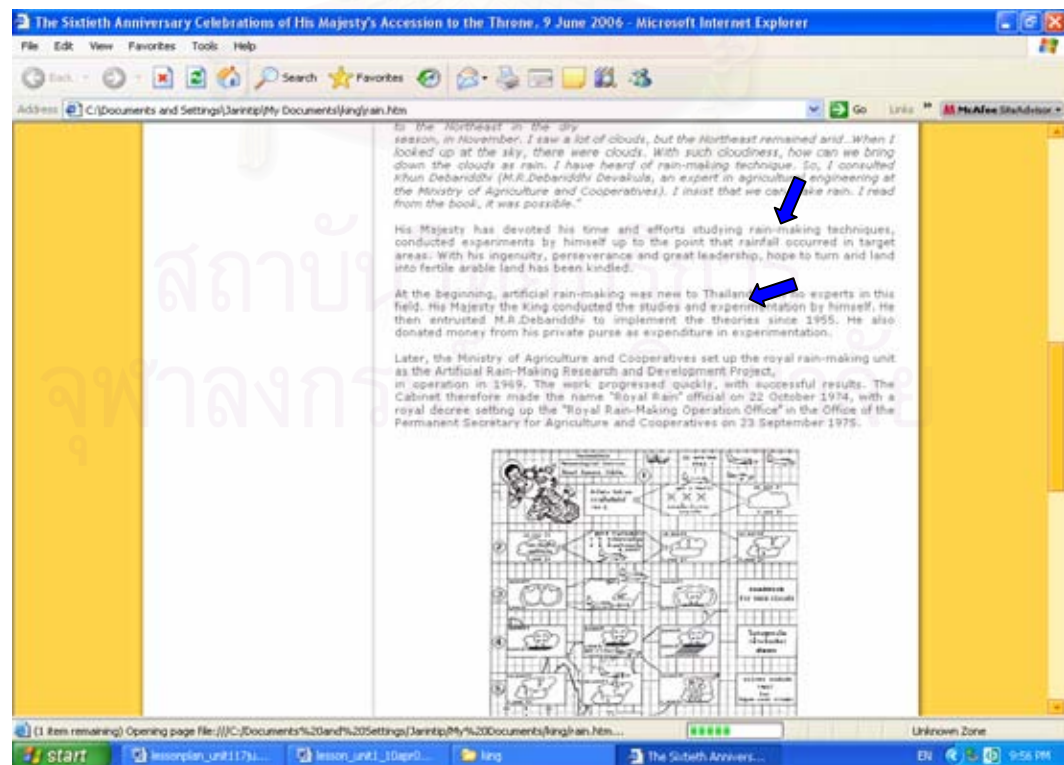
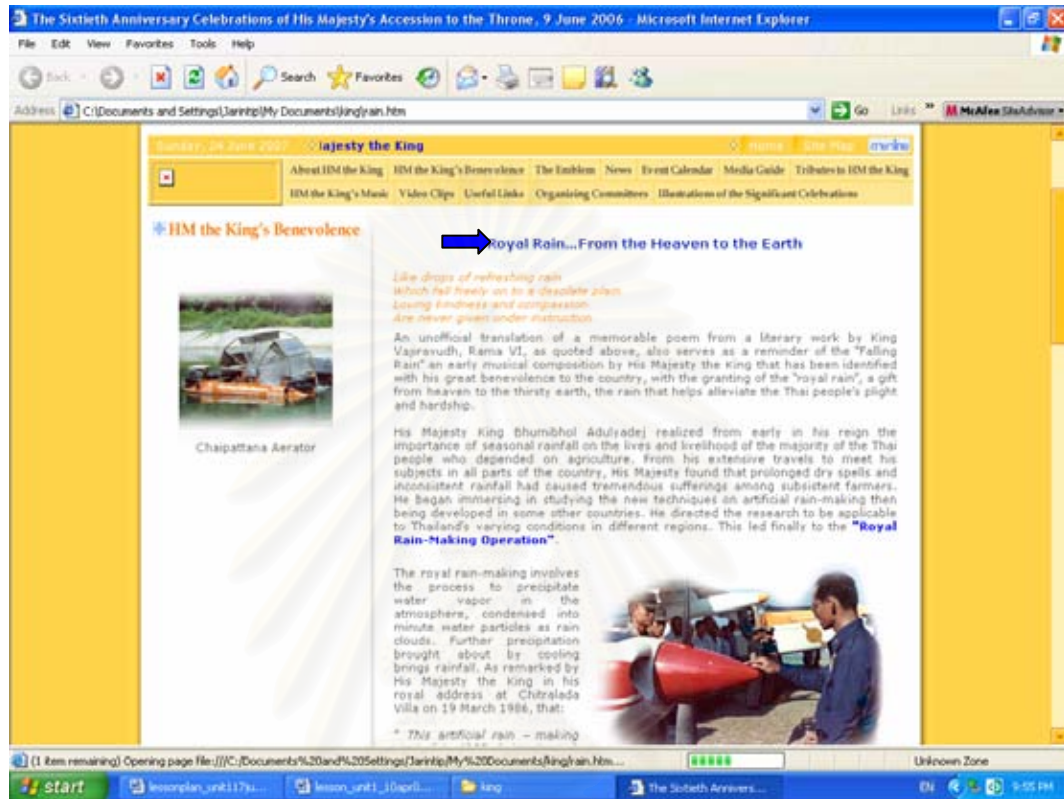
3. Partner Practice (10 minutes)

- Now, you have to work with your classmate. I would like you and your partner to find more information to this question, "*What are the working steps for each project?*" You can choose one of the following projects: *The Monkey Cheek Project, The Rainmaking Project, Green Fuel, Waste Water Treatment, Rice Bank, and The Royal Development Projects.*

- After you and your partner choose the project, I would like you to visit these two websites, www.kanchanapisek.com and www.60thcelebrations.com . You can also use www.google.co.th . After that I would like you to find the information to answer your question. (Students and their partners skim through the webpage and write down their answer with the question.)

Question: What are the working steps for the Rainmaking Project?

Answer: First, His Majesty the King studies the techniques. Then, he does the experiment.



4. Independent Practice (15 minutes)

- Well, it's time for you to continue finding more information to your own questions. Are you ready to search for information? (Yes)

- I would like you to gather information as much as you can and print out the information you find. You should skim through the website to get information needed. (Students work individually to get information needed.)

(Students continue to search more information at home if they cannot finish searching in class.)



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Phase: Comprehend and Integrate

Lesson 1.4 (50 minutes)

Cognitive Strategy Comprehension Strategy (Summarizing paragraphs)

Lesson Objectives After finishing the lesson,

1. Students should be able to read the passage and summarize its main idea.

2. Students should be able to make connection between knowledge from the text and their experiences

Procedures

1. Modeling and Demonstrating (5 minutes)

- Class, today we are going to read a passage about His Majesty the King and his working steps. If you would like to retell something to others, would you tell them every detail or would you just tell them only the important part? (We will tell only the important part.)

- That's right. Before we move on to the main reading passage, let's have a look at this paragraph. (Teacher hands out the paragraph.)

There are altogether six Royal Development Study Centers situated in every region of the country with each developing and solving problems of the local areas. Each center is set up to conduct study on a particular condition of the local area. These projects will become the model which the farmers in other areas can come to observe.

- This is a paragraph talking about the Royal Development Study Centers. The main idea of this paragraph can be something like this. "*There are six Royal*

Development Study Centers in all parts of Thailand that help develop and solve problems of the local areas.” And this is my summary for the above paragraph.

- Well, class if you would like to make a summary, what would you do? (I will make it shorter. / I will write only important idea.)

- Good. A paragraph summary should be as short as possible, but it must be a complete sentence. The summary of a paragraph is the main idea of the paragraph.

2. Scaffolding (10 minutes)

- Summarizing paragraph is a strategy that will improve your ability to comprehend and remember what you have read. As I have told you earlier, the summary of a paragraph is the main idea of the paragraph. Often but not always, the main idea is found in the topic sentence.

- Summarizing a paragraph is not difficult as some of you might think. Now, I would like you to look at this short paragraph.

During his travels to every corner of the kingdom to visit Thai people and learn about their problems, His Majesty the King found that drought becomes a serious problem in some areas of the country. This is because when there is little or no rain for a long period of time, crops and other plants die.

- To summarize this paragraph, I would like you to follow these three easy steps.

Step 1. Read the paragraph has a topic sentence, does it state the main idea of the paragraph? If so, you can use the topic sentence as a summary.

Step 2. Check to see if the paragraph contains a topic sentence. If so, you can use the topic sentence as the summary.

Step 3. Take out unnecessary words.

- So, from the paragraph I gave you, what do you think the main idea of this paragraph is? (During his travels to every corner of the kingdom to visit Thai people and learn about their problems, His Majesty the King found that drought becomes a serious problem in some areas of the country.)

- That's correct. But you can make this even shorter by taking out unnecessary words. What do you think the main idea should be? (His Majesty the King visited many places in Thailand and found that drought is a serious problem.)

- Very good.

3. Partner Practice (20 minutes)

- Now, let's practice doing a paragraph summary with your partner. Before you and your partner read the passage about His Majesty the King and his work talent, I would like you to look at the vocabulary exercise. (Teacher hands out vocabulary exercise.) These vocabularies will make your reading easier when you encounter these words. Look at the Number 1 and use the happy faces to tell how well you know these words. This isn't a test and you won't be graded. Remember you aren't supposed to know all the words. (Students work on their own.)

- Now, look at the list of the words and try to guess the meaning and match each word from a definition on the right. (Students work on their own.)

- You may come across these vocabularies when you read the texts you have searched.

Vocabulary Warm-up

1. Use the happy faces to tell how well you know these words. This isn't a text and you won't be graded. Remember: You aren't supposed to know all the words.



I know it!



I think I've seen
or heard it.



I don't know it.

..... 1. survey

..... 2. budget

..... 3. discuss

..... 4. fulfill

..... 5. information

..... 6. monitor

..... 7. advice

..... 8. document

..... 9. evaluate

..... 10. talent

2. (A) In group, look at the list of the words above. Try to guess the meaning and match each word from a definition on the right.

- | |
|----------------------|
| 1. information |
| 2. survey |
| 3. to evaluate |
| 4. to fulfill |
| 5. budget |
| 6. talent |
| 7. to monitor |
| 8. document |
| 9. to discuss |
| 10. advice |

- | |
|---|
| a. a careful study to find out details of things |
| b. the amount of money that you are able to spend |
| c. to consider in order to make judgment |
| d. an official piece of paper with writing on it |
| e. to talk about something |
| f. facts about someone or something |
| g. suggestion / what people should do |
| h. ability to do something well |
| i. to check the progress and comment on it |
| j. to make it successful / to do what is needed |

(B) Complete the sentences using the words from the column on the right in A.

- The for the Rainmaking project is from His Majesty the King. He gives the large amount of money to support this useful project.
- We should find more or facts about life on other planets.
- We can learn a lot from this old because it is an official paper that tells us about life in the past.
- We have to this task before the end of this week. We need to make it successful.
- My teacher always give me some good She usually tell me what I should do to make my life better.
- His Majesty the King has a great musical He can play many kinds of instruments very well.
- Meetings are held to the progress of the project.
- When you want to find out about people's opinions, you need to do a
- The students' final projects is very difficult to It is hard to make judgment which is the best one.
- The students should In group to talk about the idea of the new project.

- Now, you have studies the vocabulary. Then, everyone reads the passage and

then writes a summary for each paragraph on the summary handout.

His majesty the King and his work talent

¹ In order to study, plan and work with many agencies **to fulfill** the objectives of the projects, His majesty the King will follow the five working steps as follows:

Study of information

² First of all, before His majesty the King visits an area, he will study the **information** from **documents** and maps in order to learn of the conditions of the area.

Collecting On-site information

³ Then, when His Majesty and the royal procession arrive at the site, he will collect more information for facts and the latest data by: interviewing the local; conducting **a survey** of the location of the project to identify potential development; and **discussing** related information with other officials.

Planning the project

⁴ After collecting the data, the officials will plan the project according to His Majesty's **advice**. **Budget** for use in the project will be provided by His Majesty the King.

Carrying out the project

⁵ When the plan has been proved to be benefited and effective, various officials will be later assigned to the tasks to carry out the project effectively.

Monitoring and evaluation

⁶ Finally, after carrying out the project for a period, the project will be **monitored** and **evaluated**. In fact, His Majesty will return to the project site every time he has a chance to monitor and observe the progress. If he encounters any problems, he will give suggestions for the solutions.

SUMMARY HANDOUT

Paragraph 1

When working on the new project, His Majesty the King

.....
.....

Paragraph 2

His Majesty the King

.....
.....

Paragraph 3

His Majesty the King usually interview

.....
.....

Paragraph 4

His Majesty the King gives

.....
.....

Paragraph 5

The project will be carried out when

.....
.....

Paragraph 6

His Majesty the King will

and willif there are any

problems.

4. Independent Practice (15 minutes)

- Now, I would like each of you to read the text you have searched earlier. The vocabularies explained above may help you understand the text more easily. Please remember to follow the steps explained above. Use as few words as possible. (Students work individually and write the summary for each paragraph.)

(Students may continue working at home if they do not finish summarizing in class.)



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Phase Communicate to others

Lesson 1.5

Cognitive Strategy Self-explanation (Concept Mapping)

Lesson Objectives After finishing the lesson,

1. Students should be able to create the concept map to show their understanding of the conceptual knowledge.

2. Students should be able to describe pictures about the King and his working steps in each Royal Development Project.

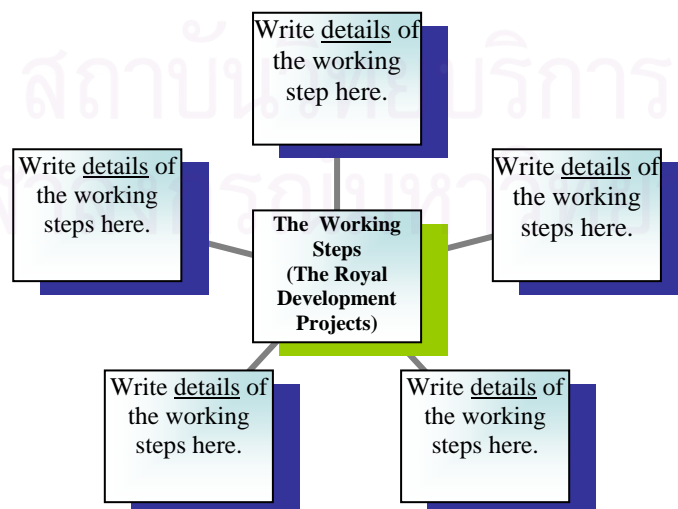
Procedures

1. Modeling and Demonstrating (10 minutes)

- Class, after you have studied a lot about His Majesty the King and how he works in order to set up the projects, it's time for you all to explain what you know to others.

- Can anyone tell me how you explain what you know to others? (We can speak in front of class. / We can write a report.)

- Good. Those are some ways to explain what you know to others. For me, I will use something like this. (Teacher shows the example of the concept map.)



- This is called a concept map. We use a concept map to help you organize everything you know about a concept or idea. Sometimes you can use pictures in your concept map to make it more interesting.

- When we make a concept map, we also write down facts and details. So do we have to write down everything? (No, we write only important things.)

- That's right. We write only important facts and details. We write only a few sentences.

2. Scaffolding (10 minutes)

- Making a concept map helps you organize your knowledge and understand the concept better.

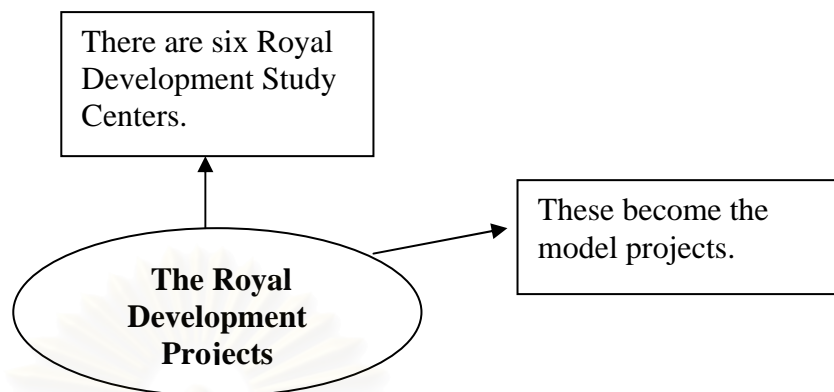
- Before you make a concept map, you should make sure that you get all the important details. You can do this by using highlighters to record key information.

- Now, I would like you to look at this paragraph and highlight the important details of the Royal Development Projects.

There are altogether six Royal Development Study Centers situated in every region of the country with each developing and solving problems of the local areas. Each center is set up to conduct study on a particular condition of the local area.

These projects will become the model which the farmers in other areas can come to observe.

- Next, after you highlight the important details, you can now fill in the each box to show the details of the key idea or concept.



3. Partner Practice (20 minutes)

- Well, I would like you to get into group of 5 people.
- Then, I would like you to use the information you have found about His Majesty the King's working steps in each project. What you have to do first is that you get together with students who choose the same project. After that, you should help each other highlighting the important details.
- It's ok if you can only find few of them. (Students work in group.)

4. Independent Practice (10 minutes)

- Now, I would like each of you to try to find the important details of the working steps and then share what you find with your group. Remember to use highlighters to locate the important information. (Students work individually.)
- I would like each group to finish this concept map at home. You should put your group's concept map on the future board. I will put each group's concept map on display. To make your group's concept map more interesting, you should try to find picture showing each working step.

(Students continue working on their concept map at home and hand in the concept map next class meeting.)

Appendix F

Lesson Plan Evaluation Form

Please check ✓ to give the comments in the column.

(Please feel free to write your comments down with pen/pencil in the assessment tool copy.)

4 = Excellent 3 = Good 2 = Average 1 = Revise

Assessment Issues	4	3	2	1
Ideas/Concept:				
1. The ideas or concept work together to make the lesson clear.				
2. The ideas are relevant to the conceptual theme (main theme)				
Objectives:				
3. The objectives are clear and concise.				
4. The objectives are relevant and consistent with the concept of the lesson.				
Materials/Worksheets:				
5. The materials and worksheets are appropriate for the lesson.				
6. The materials and worksheets are accurate and appropriate to the students' level.				
7. The materials and worksheets are understandable.				
8. The format of the worksheets is easy to fill in.				
Steps of teaching:				
9. The steps of teaching are in appropriate sequences.				
10. The steps of teaching are clear and effective.				
Activities:				
11. The activities are practical.				
12. The activities are consistent with the strategies introduced in the lesson and in each strand.				

Comments:

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Thank you very much for your time and assistance.

.....
(.....)

Assessor

Appendix G

Sample of English Reading Comprehension Test

Objective of the test

This reading comprehension test aims to evaluate students' reading comprehension for information text including determining the meaning of words by context, identifying facts in the texts, identifying main ideas, making reference from the content, drawing on background knowledge, drawing inference from the content, and evaluating the information.

Directions

1. This reading comprehension test is for Grade 8.
2. This test contains 3 sections. Each section has a passage and 10 multiple-choice questions. There are 30 questions altogether.

Section 1	Rainmaking Projects	10 questions
Section 2	Flood Prevention in Bangkok	10 questions
Section 3	Chitralada Milk Collection Center	10 questions

3. Students circle the correct answers on the answer sheet.
4. Time allocation is 50 minutes.

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Section III

Chitralada Milk Collection Center

The Chitralada Milk Collection Center was set up in 1969, at the same time¹ as the Dusit Milk Powder Plant. The center bought fresh milk from the Chitralada Dairy Farm with the aim of helping members to earn more income. Then pasteurized milk was produced and delivered to some 50 schools and the public at a low price in order to improve the health and strength of young people. 5

Presently, the Milk Collection Center receives 20-22 tons of milk a day, and can produce 10-15 tons of pasteurized milk a day. The important products are plain, vanilla, chocolate, and coffee flavored milk. The center also tries to promote a new project to prevent tooth decay in Thailand by adding fluoride to milk. This project is now producing fluoride-added milk and delivers it to some 40 schools. 10

The Chitralada Milk Collection Center offers the following milk products:

- Plain, vanilla, chocolate, and coffee flavored milk in 200-milliliter packets.
- Plain flavored milk with added fluoride in 200-milliliter packets (Only delivered to schools joining the Fluoride-Added Milk Program) 15
- Plain, vanilla, chocolate, and coffee flavored milk in 500-milliliter bottles
- Plain flavored milk in 1-liter bottles
- Plain flavored milk in 5-kilogram gallons

Source: A Guide to The Royal Chitralada Project (Brochure)

1. How was the health of most young Thai people in 1969?
 - a. Young people were strong and healthy.
 - b. Young people did not suffer from illness.
 - c. Young people had tooth decay.
 - d. Young people were not very healthy.

2. Where does the Chitralada Milk Collection Center get fresh milk from?
 - a. dairy farmers
 - b. Dusit Milk Powder Plant
 - c. Chitralada Dairy Farm
 - d. None of the above

3. Why was the Chitralada Milk Collection Center first set up?
 - a. to promote new products
 - b. to help Thai farmers become stronger
 - c. to buy fresh milk and give it to young people
 - d. to help Thai farmers to earn more money

4. What does the Chitralada Milk Collection Center do first with the fresh milk they buys from the farm?
 - a. The center will produce pasteurized milk.
 - b. The center will deliver fresh milk to some 50 schools.
 - c. The center will deliver fresh milk to some 50 schools and the public.
 - d. The center will sell fresh milk at a very low price.

5. What is good about pasteurized milk?
 - a. Young people will become healthy and strong.
 - b. It has a very low price.
 - c. It helps members to earn more income.
 - d. All of the above

6. How many tons of pasteurized milk can Chitralada Milk Collection Center produce daily?

- a. 20-22 tons
- b. 30-37 tons
- c. 10-15 tons
- d. 10-22 tons

7. When you have “tooth decay” line 9, you

- a. should eat sweets as much as you like
- b. should go to the dentist
- c. shouldn't drink milk
- d. shouldn't brush your teeth

8. What is the newest product of Chitralada Milk Collection Center?

- a. fluoride milk
- b. plain flavored milk
- c. coffee flavored milk
- d. vanilla flavored milk

9. What does “it” line 10 mean in this passage?

- a. pasteurized milk
- b. plain pasteurized milk
- c. fluoride-added milk
- d. fresh milk

10. If your school is in a Fluoride-Added Milk Program, you will probably drink?

- a. a 200 milliliter packet of chocolate milk
- b. a 500 milliliter bottle of plain milk
- c. a 200 milliliter packet of plain flavored milk
- d. a 500 milliliter bottle of chocolate milk

Appendix H

English Reading Comprehension Test Evaluation Form

Please rate (✓) these following items according to your opinions.

Congruent = 1 Questionable = 0 Incongruent = -1

Items	Reading Comprehension Aspects	1	0	-1	Comments
Passage 1					
Does the test item evaluate:					
1	-identifying facts in the text				
2	-activating background knowledge				
3	-identifying facts in the text				
4	-drawing on background knowledge				
5	-determining the meaning of words by context				
6	-making reference from the content				
7	-evaluating the information				
8	-identifying facts in the text				
9	-evaluating the information				
10	-drawing inference from the content				
Passage 2					
Does the test item evaluate:					
1	-drawing on background knowledge				
2	-identifying facts in the text				
3	-making reference from the content				
4	-identifying main idea				
5	-identifying facts in the text				
6	-identifying main idea				
7	-determining the meaning of words by context				
8	-making reference from the content				
9	-identifying facts in the text				
10	-making reference from the content				
Passage 3					
Does the test item evaluate:					
1	-drawing inference from the content				
2	-identifying facts in the text				
3	-identifying main idea				
4	-identifying facts in the text				
5	-evaluating the information				
6	-identifying main idea				
7	-determining the meaning of words by context				
8	-identifying facts in the text				
9	-making reference from the content				
10	-drawing on background knowledge				

Additional Comments:

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Thank you very much for your time and assistance.

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(.....)



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Appendix I

The Item-Objective Congruence Index of the English Reading Comprehension Test

Item	Expert			Total	Meaning
	D	E	F		
1	0	0	-1	-0.33	Modified
2	+1	+1	+1	1.00	Reserved
3	0	0	0	0.00	Modified
4	+1	0	0	0.33	Modified
5	+1	+1	+1	1.00	Reserved
6	+1	0	+1	0.66	Reserved
7	+1	+1	+1	1.00	Reserved
8	+1	+1	+1	1.00	Reserved
9	+1	+1	+1	1.00	Reserved
10	0	+1	+1	0.66	Reserved
11	+1	+1	+1	1.00	Reserved
12	+1	+1	0	0.66	Reserved
13	+1	+1	+1	1.00	Reserved
14	+1	+1	+1	1.00	Reserved
15	0	0	+1	0.33	Modified
16	-1	0	0	-0.33	Modified
17	+1	+1	+1	1.00	Reserved
18	+1	0	0	0.33	Modified
19	+1	+1	+1	1.00	Reserved
20	+1	+1	+1	1.00	Reserved
21	+1	+1	0	0.66	Reserved
22	+1	+1	+1	1.00	Reserved
23	0	+1	0	0.33	Modified
24	+1	+1	+1	1.00	Reserved
25	+1	+1	+1	1.00	Reserved
26	+1	+1	+1	1.00	Reserved
27	+1	0	+1	0.66	Reserved
28	+1	+1	+1	1.00	Reserved
29	+1	+1	0	0.66	Reserved
30	0	+1	+1	0.66	Reserved

Appendix J

Item Analysis of the English Reading Comprehension Test

Item No.	Difficulty Index	Discrimination Index
1	.750	.510
2	.350	.625
3	.450	.473
4	.425	.543
5	.325	.488
6	.400	.636
7	.275	.292
8	.425	.609
9	.400	.557
10	.425	.406
11	.450	.415
12	.700	.367
13	.525	.397
14	.475	.560
15	.375	.420
16	.450	.669
17	.500	.545
18	.500	.545
19	.525	.378
20	.425	.662
21	.475	.521
22	.525	.597
23	.375	.646
24	.425	.517
25	.525	.716
26	.400	.347
27	.650	.245
28	.525	.716
29	.525	.722
30	.575	.498

Appendix K

Reading Self-Efficacy Questionnaire (Students' form)

แบบสอบถามการรับรู้ความสามารถด้านการอ่านของตนเอง (ฉบับนักเรียน)

คำแนะนำ

1. แบบสอบถามเพื่อวัดเพื่อวัดการรับรู้ความสามารถด้านการอ่านของตนเองนี้ใช้สำหรับนักเรียน
ชั้นมัธยมศึกษาปีที่ 2
2. แบบสอบถามนี้แปลมาจากแบบสอบถามวัดความสามารถของตนเองด้านการอ่านของ Wigfield
and Guthrie (1995)
3. คำถามเกี่ยวกับการรับรู้ความสามารถด้านการอ่านของตนเองนี้มี 23 ข้อ
4. ให้นักเรียนทำเครื่องหมาย (✓) ในช่องตัวเลขที่ตรงกับลักษณะของนักเรียนมากที่สุด โดย

กำหนดให้

- | | | |
|---|---------|---------------------------------------|
| 1 | หมายถึง | ไม่ตรงกับลักษณะของนักเรียนเลย |
| 2 | หมายถึง | ใกล้เคียงกับลักษณะของนักเรียนอยู่บ้าง |
| 3 | หมายถึง | ตรงกับลักษณะของนักเรียนเป็นส่วนใหญ่ |
| 4 | หมายถึง | ตรงกับลักษณะของนักเรียนมากที่สุด |
4. ให้นักเรียนตอบตามความรู้สึกของตัวเองให้มากที่สุด และคำตอบจะไม่มีผลต่อคะแนนในการ
เรียนภาษาอังกฤษ
 5. นักเรียนมีเวลาตอบแบบสอบถามนี้ 15 นาที

แบบสอบถามการรับรู้ความสามารถด้านการอ่านของตนเอง

ข้อความ	ไม่ตรงกับ	ใกล้เคียงกับ	ตรงกับลักษณะ	ตรงกับลักษณะ
	ลักษณะของ นักเรียนเลข 1	ลักษณะของ นักเรียนอยู่ข้าง 2	ของนักเรียน เป็นส่วนใหญ่ 3	ของนักเรียน มากที่สุด 4
ฉันรู้ว่าปีนี้ฉันจะทำได้ดีในวิชาการอ่าน				
ฉันรู้สาเหตุที่บางครั้งทำให้ฉันได้คะแนนไม่ดีในวิชาการอ่าน				
บางครั้งฉันรู้สึกว่าการอ่านได้ดีเท่ากับคนอื่น				
ฉันมั่นใจว่าจะต้องได้คะแนนดีก่อนที่จะมีการเฉลยข้อสอบ				
ฉันรู้วิธีการทำให้ได้คะแนนดีในวิชาการอ่าน				
ทุกครั้งที่ย่านหนังสือฉันสามารถจินตนาการตามเรื่องที่อ่านได้				
ฉันชอบหนังสือที่ยากและท้าทายความสามารถ				
ฉันชอบค้นหาคำความหมายของคำที่ฉันไม่รู้ในพจนานุกรม				
ฉันชอบคำถามที่ทำให้ฉันได้ใช้ความคิด				
ทุกครั้งที่ย่านฉันมั่นใจว่าความเข้าใจในการอ่านของฉันจะพัฒนาขึ้น				
ฉันต้องการให้พ่อแม่ ครู หรือเพื่อนที่อ่านได้ดีกว่าช่วยฉันทำการบ้านหรืองานที่เกี่ยวข้องกับการอ่าน				
ฉันชอบที่ได้อ่านเรื่องยากๆ				
เมื่อเปรียบเทียบกับวิชาอื่นฉันมีทักษะการอ่านและทำความเข้าใจในการอ่านได้ดีที่สุด				
ฉันสามารถอ่านหนังสือที่ยากๆ ได้ถ้าหนังสือน่าสนใจ				
ฉันมั่นใจว่าเข้าใจเรื่องที่อ่านทุกครั้ง				
ฉันเรียนรู้จากการอ่านมากกว่าเพื่อนร่วมชั้นคนอื่น				
ทุกครั้งที่ย่านหนังสือฉันมั่นใจว่าฉันจำเนื้อเรื่องหรือเรื่องราวในสิ่งที่อ่านได้				
ฉันสามารถอ่านเรื่องที่ยากได้ถ้าเกี่ยวข้องกับสิ่งที่ฉันสนใจ				
ฉันสามารถบอกได้ว่าเมื่อไหร่ที่ฉันไม่เข้าใจในเรื่องที่กำลังอ่าน				
ถ้าจะเรียนวิชาการอ่านได้ดี ฉันต้องทำให้ครูรู้สึกชอบฉัน				
ฉันเป็นนักอ่านที่ดี				
ฉันชอบเรียนรู้สิ่งต่างๆจากการอ่าน				
ฉันจินตนาการถึงสิ่งที่กำลังเกิดขึ้นในเรื่องที่อ่านได้				

Appendix L

Reading Self-Efficacy Questionnaire (Experts' evaluation form)

Please rate (✓) these following items according to your opinions.

1 = Congruent 0 = Questionable -1 = Incongruent

Items	1	0	-1	Comments
1. I know that I will do well in reading this year. ฉันรู้ว่าปีนี้ฉันจะทำได้ดีในวิชาการอ่าน				
2. I know why I sometimes get low grades in reading. ฉันรู้สาเหตุที่บางครั้งทำให้ฉันได้คะแนนไม่ดีในวิชาการอ่าน				
3. Sometimes I feel as smart as others in reading. บางครั้งฉันรู้สึกอ่านได้ดีเท่ากับคนอื่น				
4. I know how well I am doing before I get my paper back. ฉันมั่นใจว่าจะต้องได้คะแนนดีก่อนที่จะมีการเฉลยข้อสอบ				
5. I know how to get good grades in reading if I want to. ฉันรู้วิธีการทำให้ได้คะแนนดีในวิชาการอ่าน				
6. When I read a story, I am sure that I can create pictures in my mind of the ideas I read. ทุกครั้งที่อ่านหนังสือฉันสามารถจินตนาการตามเรื่องที่ได้				
7. I like hard, challenging books. ฉันชอบหนังสือที่ยากและท้าทายความสามารถ				
8. I like to look up words I don't know. ฉันชอบค้นหาคำความหมายของคำที่ฉันไม่รู้ในพจนานุกรม				
9. I like it when the questions in books make me think. ฉันชอบคำถามที่ทำให้ฉันได้ใช้ความคิด				
10. When I read a story, I am sure that I can improve my understanding. ทุกครั้งที่อ่านฉันมั่นใจว่าความเข้าใจในการอ่านของฉันจะพัฒนาขึ้น				
11. I need my parents, teachers or more competent peers to help me with my reading homework. ฉันต้องการให้พ่อแม่ ครู หรือเพื่อนที่อ่านได้ดีกว่าช่วยฉันทำการบ้านหรืองานที่เกี่ยวข้องกับการอ่าน				

Items	1	0	-1	Comments
12. I like it when we get a lot of difficult reading. ฉันชอบที่ได้อ่านเรื่องยากๆ				
13. In comparison to my other school subjects, I am best at reading. เมื่อเปรียบเทียบกับวิชาอื่นฉันมีทักษะการอ่านและทำความเข้าใจในการอ่านได้ดีที่สุด				
14. If a book is interesting, I don't care how hard it is to read. ฉันสามารถอ่านหนังสือที่ยากๆได้ถ้าหนังสือน่าสนใจ				
15. When I read a story, I am sure that I can understand what I read. ฉันมั่นใจว่าเข้าใจเรื่องที่อ่านทุกครั้ง				
16. I learn more from reading than most students in the class. ฉันเรียนรู้จากการอ่านมากกว่าเพื่อนร่วมชั้นคนอื่น				
17. When I read a story, I am sure that I can remember what happened in the story. ทุกครั้งที่อ่านหนังสือฉันมั่นใจว่าฉันจำเนื้อเรื่องหรือเรื่องราวในสิ่งที่อ่านได้				
18. If the project is interesting, I can read difficult materials. ฉันสามารถอ่านเรื่องที่ยากได้ถ้าเกี่ยวข้องกับสิ่งที่ฉันสนใจ				
19. When I read a story, I am sure that I can tell when I don't understand something. ฉันสามารถบอกได้ว่าเมื่อไหร่ที่ฉันไม่เข้าใจในเรื่องที่กำลังอ่าน				
20. To do well in reading, I have to get the teacher to like me. ถ้าจะเรียนวิชาการอ่านได้ดี ฉันต้องทำให้ครูรู้สึกชอบฉัน				
21. I am a good reader. ฉันเป็นนักอ่านที่ดี				
22. I usually learn difficult things by reading. ฉันชอบเรียนรู้สิ่งต่างๆจากการอ่าน				
23. I can imagine what's taking place in the story. ฉันจินตนาการถึงสิ่งที่กำลังเกิดขึ้นในเรื่องที่อ่านได้				

Other suggestions:

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Appendix M

The Item-Objective Congruence Index of the Reading self-efficacy questionnaire

Item	Experts			Total	Meaning
	G	H	I		
1	+1	0	0	0.33	Modified
2	+1	+1	+1	1.00	Reserved
3	+1	+1	+1	1.00	Reserved
4	0	0	+1	0.33	Modified
5	0	+1	0	0.33	Modified
6	+1	+1	+1	1.00	Reserved
7	+1	+1	+1	1.00	Reserved
8	+1	+1	+1	1.00	Reserved
9	+1	+1	+1	1.00	Reserved
10	+1	0	+1	0.66	Reserved
11	+1	+1	+1	1.00	Reserved
12	+1	+1	+1	1.00	Reserved
13	+1	+1	0	0.66	Reserved
14	+1	+1	+1	1.00	Reserved
15	0	0	+1	0.33	Modified
16	0	+1	+1	0.66	Reserved
17	+1	+1	+1	1.00	Reserved
18	+1	0	0	0.33	Modified
19	+1	+1	+1	1.00	Reserved
20	+1	+1	+1	1.00	Reserved
21	+1	0	+1	0.66	Reserved
22	+1	0	+1	0.66	Reserved
23	+1	+1	+1	1.00	Reserved

Appendix N

Samples of students' work



BIOGRAPHY

Jarintip Worakitsawat was born in Bangkok. She obtained her BA in English (Second Class Honors) from the Faculty of Liberal Arts, Thammasat University in 1997. In 2005, she continued her Master degree in Teaching English as a Foreign Language, Faculty of Education, Chulalongkorn University. She is currently Head of the English Department and teaches English at Chitralada School, Bangkok.



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