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CORI: Explicit Reading Instruction to Enhance Informational Text Comprehension and Reading Engagement for Thai EFL Students

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Abstract

The study aimed to examine the effect of explicit reading instruction as an approach to Concept-Oriented Reading Instruction (CORI) framework on EFL students' informational text comprehension and engagement. The explicit reading instruction was implemented with 39 first-year Thai undergraduate students over a 10-week period. It was found that the students improved their reading comprehension and engagement after the implementation. There were also significant differences between the students' pre-test and post-test mean scores. The results from the Reading Engagement Index (REI) and Reading Engagement Checklist indicated positive changes in behavioral, affective and cognitive engagements. However, the social engagement was unnoticeable. Three instructional practices were videotaped and

transcribed to analyze students' performances and engagement processes in reading. The study suggests that EFL reading educators should encourage students to involve more in social interactions in order to enable them to see perspectives and to socially construct information from texts. Discussion and implications provided the guidelines for engaging readers in the reading process.

Keywords: reading strategies, reading engagement, EFL reading, reading ability

Introduction

Reading is the ability to draw meaning from the printed page and interpret this information appropriately (Grabe & Stoller, 2011: 3). It is considered as a complex skill revealed by the syntheses of L1 and L2 reading research (Grabe, 2009; Han & Anderson, 2009; Koda, 2007). These studies have deeply focused on comprehension which is the important fundamental purpose for reading, but requires both skills and strategies under the complexities of reading processes. People's minds constantly engage in different complex processes while reading. They start by processing information at the sentence level by using bottom-up strategies. They focus on identification of a word's meaning and grammatical category, on sentence structure, on text details, and so forth. During this process, readers constantly check their own schemata to see if the new information fits using top-down strategies such as background knowledge and prediction (Aebersold & Field, 1997). Krashen (2013) also pointed out that teaching a strategy to obtain background information in the first or second language helpfully made input or contents more comprehensible. It was, thus, significant to master academic reading skills and strategies for reading to learn information in the content areas (Grabe & Stoller, 2014).

Many researchers have acknowledged the importance of students' informational text comprehension in a second and

foreign language reading (Grabe & Stoller, 2014; Shen, 2013). However, Shen (2013) found that technical university EFL students' academic reading difficulties were due to linguistic and content-matter constraints. Numerous studies in Thailand (Comchaiya & Dunworth, 2008; Intratat, 2004; Suknantapong, Karnchanathat & Kannaovakun, 2002) have indicated that attaining facility in second language reading comprehension can be a problematic process and that many learners experience considerable difficulties in developing their expertise in reading. Furthermore, the mechanism for achieving the reading ability to comprehend foreign language reading texts also includes an educational approach which does not foster independence and autonomy; materials that are not always engaging; and a classroom environment which is not optimally conducive to learning.

Accordingly, reading instruction designed to foster reading engagement and comprehension through the teaching of reading strategies, and its explicit support of the development of student intrinsic motivation to read is really needed. Explicit instruction in reading comprehension and use of motivation moments can guide teachers to develop engaged readers in EFL reading classrooms (Anderson, 2014). In other words, reading engagement may facilitate informational text comprehension.

Research questions

1) To what extent does explicit reading instruction increase the students' English reading ability?
2) To what extent does explicit reading instruction increase the students' levels of reading engagement?

Theoretical Framework

Comprehension

Reading comprehension can be defined as abilities to recognize words rapidly and efficiently, develop and use a large amount of vocabulary, process sentences in order to build comprehension, and engage a range of strategic processes and

underlying cognitive skills, e.g. setting goals, changing goals flexibly, and monitoring comprehension. These processes also include interpreting meaning in relation to background knowledge, interpreting and evaluating texts in line with readers' goals and purposes (Grabe, 2014).

Comprehension is not a simple information processing ability. It requires an ability to identify main ideas in the text, an awareness of discourse structure, and strategic processing (Grabe & Stoller, 2011: 140). The research on comprehension among English speakers showed reading strategies, such as asking questions while reading, making predictions, summarizing, and monitoring comprehension improve reading comprehension (Taboda & Guthrie, 2006; Mokhtari, 2008; Malcolm, 2009; Lipka & Siegel, 2012; Perfetti & Stafura, 2014). Numerous research reviews provided substantial evidence that explicit comprehension instruction improved students' understanding of texts they read at school (Block, Gambrell, & Pressley, 2002; Block & Pressley, 2007; Ruddell & Unrau, 2004).

Many educators and researchers have focused on developing readers' cognitive and metacognitive strategies (Chamot, 2005; Baker, 2008; Macaro & Erler, 2008; Zhang & Seepho, 2013; Tavakoli, 2014). According to these studies, metacognitive strategies, particularly self-monitoring and self-regulating activities, were the strategies designed to increase readers' awareness of whether or not they could comprehend what they read. The use of metacognitive strategies in the reading process, therefore, is considered a valuable aid to support cognitive, social, and linguistic abilities. Thus, there are six explicit reading strategies employed in this study.

- ***Goal Setting***

Goal setting is one of the cognitive processes that is central to all human activity and is driven by attended processing (Grabe, 2009). In academic settings, readers read with a variety of goals and make plans for how to achieve these goals.

- ***Monitoring***

In the process of meaning construction, comprehension monitoring is an important factor as it enables readers to keep track of what they are reading in order to make sure it makes sense (Grabe & Stoller, 2011).

- ***Evaluation***

Evaluating is a reading strategy performed after reading. This technique helps the readers check and evaluate the accuracy of their understanding, recheck what they are confused about, and find solutions to solve the problems (Collin & Cheek, 1993). It is now widely accepted that self-assessment is a successful attempt for assessing the learning process and locating personal profile matched or miss-matched stance (McNamara, 2000).

- ***Sensing Others' Feeling***

In reading instruction, students can sense the feelings of people with whom they communicate informally through letters, notes, or memos. Formal writing like novels, stories, and articles can be understood more easily when the learners consciously try to get inside the skin of the writer to understand the writer's point of view (Oxford, 2011).

- ***Collaboration***

Many studies have examined various forms of cooperative learning. One of the most popularly used cooperative approaches for teaching literacy skills is Collaborative Strategic Reading, or CSR (Klingner & Vaughn, 1999). CSR has been developed to combine typical cooperative learning structures with instruction in reading comprehension strategies; in CSR classrooms, "students work in small cooperative groups to assist one another in applying four reading strategies that facilitate their comprehension of content area text" (Klinger &Vaughn, 1999: 739). CSR is widely used with both L1 and L2 students. This approach is very interesting from an L2 standpoint because it has been obviously

effective with struggling readers, including language-minority students (Grabe, 2009).

- ***Exchanging Explanations***

The theoretical rationales invoke to explain the role of discussion in promoting students' reading comprehension largely derive from socio-cognitive and socio-cultural theories. According to Piaget (1952), social interaction was a primary means of promoting individual reasoning. Similarly, Vygotsky (1986) conceived of learning as a culturally embedded and socially mediated process in which discourse played a primary role in the creation and acquisition of shared meaning making. In the context of discussion, students made public their perspectives on issues arising from the text, considered alternative perspectives proposed by peers, and attempted to reconcile conflicts among opposing points of view.

Reading Ability

Reading ability generally covers comprehension skills, strategies and knowledge resources available to the readers (Grabe & Stoller, 2011). Some of the key components of comprehension include decoding skills, vocabulary knowledge, grammar knowledge, world knowledge, short-term memory, and inferential knowledge. Grabe and Stoller (2011) outlined the way that reading comprehension processes were likely to work for fluent readers by dividing the explanation into two parts: lower-level processes and higher-level processes. The lower-level processes represented the more automatic linguistic processes and were typically viewed as more skill-oriented. The higher-level processes generally represented comprehension, involving interpretation of the texts, combination of reading strategies, making inferences and drawing extensively on background knowledge.

The use of questions is one of common types of reading task. Reading questions can encourage students to regard reading as a means to look for answers; function to direct the students' attention to the important aspects of the text (Nuttall, 2005).

Reading questions can be categorized according to the degree of cognitive activity that they encourage, the type of reading skills that they require, the levels of comprehension that they promote, and the degree of reading proficiency that they demand (Day & Park, 2005; Nuttall, 2005).

Nuttall (2005) has proposed a taxonomy of questions that comprises six categories as follows:

Type 1: Questions of literal comprehension

These questions are the same as the lower-order questions. They demand the recognition or recall of factual information explicitly stated in the text.

Type 2: Questions involving reorganization or reinterpretation

Reinterpretation is required in this type of question. It requires readers to read between the lines or beyond the lines. The readers need to obtain bits and pieces of surface information from different parts of the text and put them together in a new way.

Type 3: Questions of inference

The questions are considered more cognitively challenging than the first two question types. The readers need to understand the text well enough to make logical and conceptual inferences.

Type 4: Questions of evaluation

Evaluative questions ask the readers to make a considered judgment about the text in terms of what the author is trying to do and how well they achieve it.

Type 5: Questions of personal response

These questions ask for a personal reaction based on the text. The questions depend least on the writer. Sometimes they overlap with the fourth type.

Type 6: Questions concerned with how writers say what they mean

These questions ask for the reader's opinion about the author's way of expressing ideas and organizing the text.

Nuttall (2005) stated that Type 1 Questions were mainly found in second or foreign language textbooks with a few Type 2 and 5 questions. Accordingly, she suggested that the questions of personal response to what the writer said in a text should be employed more frequently.

Day and Park (2005) also found that the students could perform well on the types of comprehension questions that had been repeatedly used by their teachers. Therefore, they suggested that the teacher should teach the students how to go beyond a literal level of understanding and provide them opportunities to engage with all six types of comprehension questions. However, it was not stated clearly that at what proficiency level of the students should be given which types of comprehension questions and to what degree students would be able to develop their reading abilities if an emphasis was placed on higher-order questions.

Reading Engagement

According to Skinner et al. (2009), engagement was a reflection or manifestation of motivated action, and the action incorporated emotions, attention, goals, and other psychological processes along with persistent and effortful behavior. Thus, reading engagement can be defined as interacting with text in ways that are both strategic and motivated (Guthrie & Wigfield, 2000). The engaged readers, therefore, are motivated to read, strategic in their approaches to comprehend what they read, knowledgeable in their construction of meaning from text, and socially interactive while reading (Guthrie et al., 2004; Guthrie, Wigfield, & You, 2012). Several dimensions of engagement proposed by Fredrick, Bluemenfield and Paris (2004) were behavioral, emotional, and cognitive engagements.

Behavioral engagement is direct involvement in a set of activities and includes positive conduct, effort and persistence, and participation in extracurricular activities. Emotional engagement covers both positive and negative affective reactions, e.g. interest, boredom, anxiety, frustration to activities as well as to individuals with whom they do the activities, namely teachers and peers. It also comprises identification with school.

Cognitive engagement means willingness to exert the mental effort needed to comprehend challenging concepts and accomplish difficult tasks in different domains as well as the use of self-regulatory and other strategies to guide one's cognitive efforts. In addition, Guthrie et al. (2004) also posited that social interaction in reading was one of four defining characteristics of engaged readers, along with cognitive, behavioral, and emotional involvement in literacy activities.

Many research studies have pointed out that achievement and engagement are reciprocal (Swan, 2003; Guthrie et al., 2004; Grabe, 2009; Guthrie & Wigfield, 2000; Wentzel, 2005; Guthrie, Klauda, & Ho, 2013; Guthrie, & Klauda, 2014). In other words, reading achievement definitely is a byproduct of students' engagement. Whenever students encounter and digest books, their competence in reading grows. Engaged readers become facile in all the cognitive systems of word recognition, sentence processing, paragraph structuring, and integrating new information with prior knowledge (Grabe & Stoller, 2011).

However, reading engagement research has been mainly done with elementary, middle, or secondary school students. Studies on reading engagement of students at the tertiary level are still limited.

Concept-Oriented Reading Instruction (CORI)

Explicit Reading Instruction has been built upon principles of Concept-Oriented Reading Instruction (CORI) which is an instructional approach that allows students an opportunity to engage in reading informational texts when using hand-on activities and fostering collaboration. Concept-Oriented Reading

Instruction (CORI) advocated by Guthrie, McRae and Klauda (2007) incorporated classroom practices that combined reading strategy instruction, motivational-engagement supports, and content goals. CORI's guiding principles comprise(a) explicit instruction in significant reading strategies on a continual basis, (b) an emphasis on vocabulary development, (c) a range of coherent contents, materials and student choices, (d) reading fluency practices, (e) time for extensive reading and (f) integrated reading-writing tasks.

Many experimental studies evaluating the effectiveness of CORI were conducted for years (Guthrie, McRae & Klauda, 2007; Guthrie, Klauda, & Morrison, 2012; Wigfield et al., 2008; Guthrie, Wigfield, & You, 2012; Guthrie, Klauda, & Ho, 2013). These studies provided strong evidences for the impact of the CORI approach on reading comprehension and engagement. Wigfield et al. (2008) investigated the CORI instructional effects on elementary students' reading comprehension and reading engagement. The findings indicated that CORI improved the students' reading comprehension to the extent that it increased the students' engagement processes in reading. Guthrie, Klauda and Ho (2013) further investigated the interrelationships of reading instruction, motivation, engagement, and achievement. They conducted the study with 1,159 seventh graders to implement CORI for six weeks. The results showed that CORI directly contributed to motivation, engagement, and achievement.

In this study, Concept-Oriented Reading Instruction (CORI) was adopted to explicitly teach reading comprehension strategies for informational texts and provided classroom practices for engaged readers. There were four instructional phases, including (a) Observe and Personalize, (b) Search and Retrieve, (c) Comprehend and Integrate and (d) Communicate to Others, respectively.

The Observe and Personalize phase aimed to develop students' awareness of their personal background knowledge that was integrated into three thematic units such as food, health and technology. The focus of each unit was on teaching informational

text comprehension to promote levels of students' reading engagement. During this phase, teachers built metacognitive knowledge or awareness of activities to assist students in learning a language and provided classroom practices emphasizing the importance of personal engagement.

Figure1: Observe & Personalize

The Search and Retrieve phase aided students to know exactly what they really needed or wanted to read since it allowed them to disregard the rest or use it as background information. Classroom practices in this phase were illustrated as skimming and scanning, previewing questions, and concept mapping. These guided questions offered many clues in a form of "true/false" or "yes/no" responses or a choice from a set of answers while searching for information. Moreover, building concept mapping such as charts to complete, lists to write, diagrams to fill out, and other mechanisms also provided clues for what kind of general

points or specific details to help retrieval information quickly and efficiently.

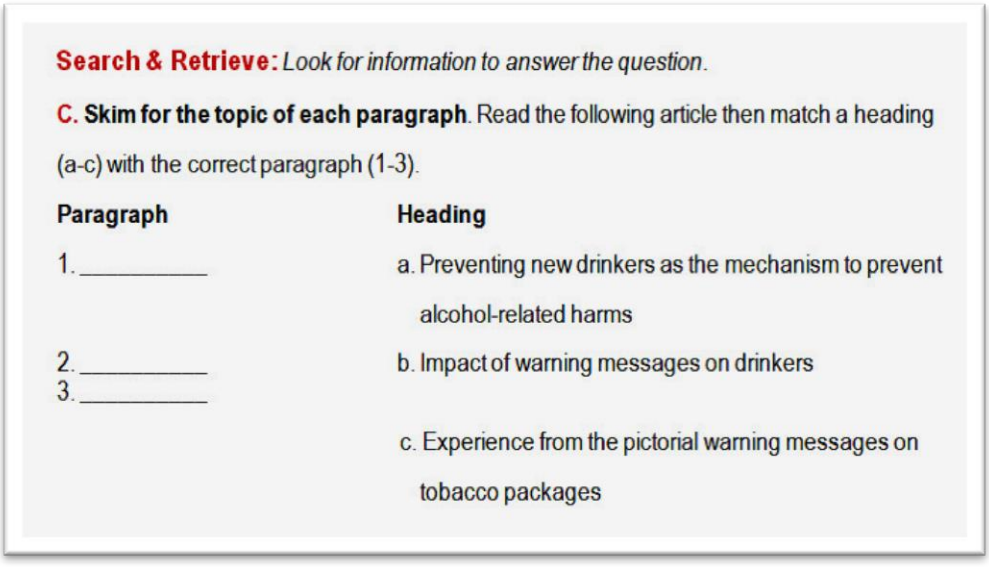

Figure 2: Search & Retrieve

The Comprehend and Integrate phase focused on explicit instruction that the teacher provided to teach a particular strategy for comprehension of informational texts such as goal-setting, comprehension monitoring, evaluation, sensing others' feeling, collaborative work, and exchanging explanations.

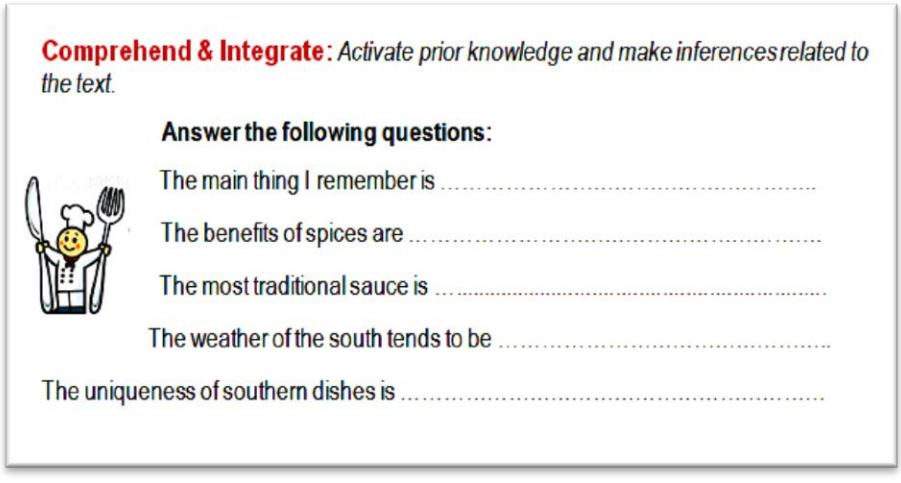

Figure 3: Comprehend & Integrate

The Communicate to Others phase enhanced students to reflect on the selected strategy, appraised success in using that strategy and shared the learned information with peers. In this phase, students were assigned to either individual or group assignments depending on the strategy they were practicing. After that, the teacher asked the students to write down which strategy they had used during each assignment. In the reflection, the students indicated how the strategy worked, and noted any changes in the reading process from the way in which it had been originally performed in class. The teacher tended to guide a whole class discussion about the appropriate strategy meanwhile each student kept dialogue journals and shared to the total group. The students could also use a checklist to report the strategy with different materials. Furthermore, they might design and create a method for sharing the information based on what they learned from reading informational texts such as conducting peer teaching, making a poster or developing project works.

Figure 4: Communicate to Others

Concept-Oriented Reading Instruction (CORI) is an explicit reading instruction, an instructional framework which is intended for L1 readers with enough linguistic abilities to communicate with others about the conceptual themes explored in class. Such abilities, however, may rarely be the case with EFL learners. In fact, EFL teachers should realize that the main emphasis in CORI often overlaps with pedagogical priorities in EFL reading instruction; for instance, teaching students how to become more strategic readers, facilitating student motivation, and incorporating extensive

reading in class (Grabe & Stoller, 2014). Grabe and Stoller (2014) made a clear connection between CORI and EFL content-based instruction, pointing out that empirical research on CORI provided support for successful content and language integration in EFL settings.

Context of the Study

This study was conducted at a Thai public university. The participants were 39 first-year students majoring in English who enrolled in the *Paragraph Reading Strategies* course. Three students were selected and videotaped in Weeks 3, 6, and 9. The criterion for the selection was based on their scores on the Reading Engagement Index. The students were in the top 5% of the high-engaged students. Then, they were rated according to the teacher's reading engagement checklist.

Methodology

Research Design

A one-group pre-and-post-test design, in which a single group is measured or observed not only after being exposed to a treatment of some sort, but also before (Wasanasomsithi, 2004), was used in this study.

Participants

The participants were 39 first-year undergraduate students majoring in English at the Faculty of Humanities and Social Sciences at a public university in Songkhla, Thailand. There were 34 females and 5 males, with the mean age of 18.5 years old, enrolled in English Paragraph Reading Strategies. Firstly, English Reading Ability Test (ERA Test) and Reading Engagement Index (REI) were used at the beginning of the course. Then, three of the subjects from the top 5% of high engaged readers were selected based on their scores on the Reading Engagement Index (REI). The selected subjects were videotaped in Week 3, 6, and 9 in order to observe students' performances while completing the reading

tasks. The verbatim were transcribed and coded according to the Reading Engagement Checklist.

Research Instruments

Three main instruments were used for the study: 1) the English Reading Ability Test (ERA Test), 2) Reading Engagement Index (REI), and 3) Reading Engagement Checklist.

- ***English Reading Ability Test (ERA Test)***

The ERA Test was constructed to assess the ability to comprehend informational texts. The test consisted of four 300-450-word passages on food, health, and technology. Each informational text was an extract of real-world sources as journals and magazines followed by four multiple-choice items, for a total of 21 items. There were five types of comprehension as proposed by Nuttall (2005), including the following aspects (a) literal comprehension, (b) reorganization or reinterpretation, (c) inference, (d) evaluation, and (e) word-attack and text-attack skills. An identical form was administered before and after implementation to compare changes in reading comprehension. The content of the test was validated and pilot tested to ensure its reliability (r = .68).

- ***Reading Engagement Index***

The REI was used to address the rating of the extent to which each student was an engaged reader before and after implementation. It was adapted from the Reading Engagement Index (REI) to examine students' level of reading engagement (Wigfield et al., 2008). The Reading Engagement Index focused on what levels of engagement students reported on the following statements, including (1) read often independently (behavioral), (2) read favorite topics and authors (motivation-intrinsic), (3) distract easily in self-selected reading (motivation-intrinsic reverse coded), (4) work hard in reading (cognitive-effort), (5) are a confident reader (motivation self-efficacy), (6) use comprehension strategies well (cognitive-strategies), (7) think deeply about the content of

texts (cognitive-conceptual orientation), and (8) enjoy discussing books with peers (motivation-social) (Wigfield, et al., 2008). Students rated each statement on a 5-point Likert scale where 5 corresponded to "very true of me" and 1 corresponded to "not at all true of me." All the items were translated into Thai.

- ***Reading Engagement Checklist***

The Reading Engagement Checklist was used to measure students' reading engagement levels. The student engagement checklist developed by Lutz, Guthrie, and Davis (2006) was adopted and translated into Thai in order to assess four dimensions of students' reading engagement: affective, behavioral, cognitive, and social engagement, on 4-point scales. The segment of the videotaped Units (Week 3, 6 and 9) that represented the focus of the day's Unit was transcribed for the analyses of student engagement. For each 30-second interval of the Unit segments, three raters–university English instructors–rated three high engaged students on 4-point scales through several rounds of independent and mutual viewing of this study's videotapes. The inter-rater reliability of the checklist was 0.908 which indicated that the coding was highly consistent.

Data Collection

Prior to the Explicit Reading Instruction, the English Reading Ability Test (ERA Test) and Reading Engagement Index (REI) were administered to the students in order to comprehend informational texts and levels of engagement. Before participating in the instruction, the students received an overview of the course. The content of each unit and classroom practice was also briefly explained. A total of three thematic units lasted over ten weeks with an emphasis on explicit strategy instruction for goal-setting, monitoring, and evaluation strategies. The Reading Engagement Checklist was then rated in order to assess the four dimensions of the students' reading engagement: affective engagement, behavioral engagement, cognitive engagement, and social engagement. Three students were selected from their high scores on the Reading

Engagement Index (REI) and were videotaped in Week 3, 6, and 9 in order to triangulate quantitative and qualitative data and gain insightful information using the Reading Engagement Checklist.

Data Analysis

To respond to research questions, the findings from both quantitative and qualitative data were reported in support of the reading ability and reading engagement. The scores from the English Reading Ability Tests were compared to examine effects of the treatments on the experimental group using the dependent samples *t*-test and effect size (*d*). The effect size of these two mean scores was also calculated. The effect size provided a measure of the magnitude of the difference expressed in standard deviation units in the original measurement. Descriptive statistics were computed to report the overall group mean scores and its standard deviation (S.D.) for each item of the REI. The qualitative data was analyzed based on the classroom observation in Week 3, 6, and 9 using the Reading Engagement Checklist.

Results

Research Question 1 examines the improvement of test scores after the treatments, and the mean scores of English reading ability pre- and post-test were used. Research Question 2 deals with the level of reading engagement. Behavioral, motivational, and cognitive aspects of reading engagement were measured from the Reading Engagement Index (REI) and reading engagement checklist. The research findings were described as follow.

EFL Reading Comprehension

Table 1: EFL Reading Comprehension (n=39)

	Mean	Min	Max	S.D.	t	df	Sig.	Mean difference	d
Pre-test	6.97	3	14	2.59	3.25	38	.002	1.33	.52
Post-test	8.31	4	13	2.31					

Table 1 shows that students made a significant improvement (t (38) = 3.255, p<0.05) on their EFL reading comprehension pre- and post-tests after 10 weeks of the treatment. The effect size of these two mean scores using Cohen's *d* was described as medium (*d* =.52).

Levels of Reading Engagement

Table 2: Reading Engagement Index

Statements	Pre-intervention		Level	Post-intervention		Level
	Mean	S.D.		Mean	S.D.	
1. Often reads independently.	3.13	0.80	Somewhat true of me	3.51	0.91	Somewhat true of me
2. Reads favorite topics and authors.	3.56	0.99	Somewhat true of me	3.95	1.14	Somewhat true of me
3. Easily distracted in self-selected reading.*	4.03	0.95	Very true of me	4.46	0.75	Very true of me*
4. Works hard in reading	2.28	0.79	Not very true of me	2.51	0.79	Not very true of me
5. Is a confident reader.	2.82	0.75	Not very true of me	3.05	0.79	Somewhat true of me
6. Uses comprehension strategies well.	2.72	0.91	Not very true of me	3.56	0.71	Somewhat true of me
7. Think deeply about the content of texts.	2.69	0.80	Not very true of me	3.28	0.94	Somewhat true of me
8. Enjoys discussing books with peers.	2.79	0.92	Not very true of me	3.49	0.97	Somewhat true of me
Total	3.00	0.87	Somewhat true of me	3.48	0.88	Somewhat true of me

Note: * reverse coded

Table 2 reports the results of the Reading Engagement Index (REI) with no missing value. The mean scores of the REI were higher after 10 weeks of the treatment (M = 3.48, S.D. = 0.88). Although the students revealed that they "Easily distracted in self-selected reading" as their first choice before and after the intervention (Item 3, M = 4.03, S.D. = 0.95, M = 4.46, S.D. = 0.75),

Item 4 “Works hard in reading” was the least favored on the index (M = 2.28, S.D. 0.79, M = 2.51, S.D. = 0.79). Both items indicated that the students had low levels of intrinsic motivation for reading as Item 3 (motivation-intrinsic) was reversely coded. Thus, the students did not possess much cognitive effort as they reported in Item 4 (cognitive-effort) as well.

However, the students perceived themselves as confident readers. They were strategic in their approaches to comprehend what they read, to be knowledgeable in their construction of meaning from text, and to be socially interactive while reading as shown in Item 5, 6, 7 and 8. Item 5 “Is a confident reader” connotes individuals’ confidence in their ability to solve problem or accomplish a task. The students gained this ability more as shown by the post-intervention mean scores of this item (M = 3.05, S.D. = 0.79).

Moreover, the students learned to exploit more cognitive strategies as it showed in the post-intervention mean scores of Item 6 “Uses comprehension strategies well” (M = 3.56, S.D. = 0.71) and Item 7 “Think deeply about the content of text” (M = 3.28, S.D. = 0.94). This implied that they used comprehension strategies well enough in the later lessons and they also displayed social motivation by sharing some ideas with their peer group while reading which could be noticed from the Item 8 “Enjoys discussing books with peers” (M = 3.49, S.D. = 0.97).

Table 3: Levels of Reading Engagement

Construct dimensionality of engagement	**S1**			**S2**			**S3**		
Behavioral	W3	W6	W9	W3	W6	W9	W3	W6	W9
	3.33	3.22	3.33	3.33	3.33	3.33	3.56	3.44	3.44
									Mean 3.37
Affective	W3	W6	W9	W3	W6	W9	W3	W6	W9
	2.78	3.22	3.22	2.89	3.33	3.22	2.89	3	3.56
									Mean 3.12
Cognitive	W3	W6	W9	W3	W6	W9	W3	W6	W9
	3.22	2.89	3.22	3.33	2.89	3.22	3.11	3	3.11
									Mean 3.11
Social	W3	W6	W9	W3	W6	W9	W3	W6	W9
	2.78	3.11	2.78	2.56	3.33	2.78	2.44	2.89	2.44
									Mean 2.79

Note: S = Student; W = Week

Table 3 presents the descriptive statistics for students' levels of reading engagement rated by three raters in Week 3, 6, and 9 of PIRI. Three students were selected and videotaped. The criterion for selection was based on their scores on REI. The students were in the top 5% of the high-engaged students.

The range of reading engagement level was between 2.79 to 3.37. The students displayed behavioral, affective, and cognitive, engagement at the same level. Social engagement was the least rated (M = 2.79).

Simply put, the students were actively engaged in the reading activities. Essential behaviors included concentration, paying attention in class, and participating enthusiastically in classroom interactions. Three of them were much actively engaged in almost all reading activities provided. For example, when some classmates didn't know the meaning of vinegar, a participant [S2] told them the meaning in Thai. Other participants raised their hands and made noises e.g., ooh, yeah, umm which suggested great interests.

Furthermore, students' interests were heightened by connecting their backgrounds to the text. This evidence showed when the participants read one of the lessons: *Is Facebook an Addiction?* One of the participants expressed her Facebook experience:

> Honestly, those habits described in this text are very similar to what I usually do in a day. I spend hours upon hours every day updating my status, uploading pictures, commenting on walls, playing Facebook games, and reading updates from others. Am I a Facebook addict? (S3)

These enabling behaviors also reflected affective engagement as referring to positive affective reactions toward teachers and classmates as well as cognitive engagement was utilized while they read. The cognitive engagement could be seen from the participants' responses:

> The second paragraph heading is capsaicin. I think it is oil soluble because the first paragraph already shows that capsaicin is not water soluble. (S1)
>
> Well, I think, from the last two lines of the text, the writer agreed that Facebook is not an addiction, but excessive Facebook use is a problem for some people. (S3)
>
> Does "hook" mean interest? I think it goes well with the word "addiction". (S2)

Apparently, the participants were able to interpret the writer's tone of voice in the written text. They used personal knowledge to construct meaning beyond what was literally stated. Reading aloud an unknown word for clues or using context clues was one of crucial strategies that student employed.

However, the social engagement was not clearly noticeable (M = 2.79). The students did not show quality of their verbal answer. Long deep-thinking answers were hardly found from the segmentations of video record. Not much evidence indicated that the students raised their hands to answer in group-work situations or that the students spoke out without being called upon. Some students were left behind because they were observed talking to each other while the teacher was giving explanation and while their classmates were paying attention to the lesson. Accordingly, social engagement was the least rated. Comments or interaction with eagerness or great enthusiasm were not obviously shown from the sample.

Discussion

Explicit EFL Reading Instruction for Informational Text Comprehension

According to the overall group mean scores on the English Reading Ability Tests, the students significantly increased their comprehension of informational texts. The students' reading abilities positively altered as a result of six most prominent constructs as they were postulated substantively by Guthrie,

McRae and Klauda (2007), Guthrie, Klauda and Ho (2013), and lastly Guthrie and Klauda (2014). They were (a) thematic unit, (b) relevance, (c) importance, (d) collaboration, (e) choice, and (f) success.

Highlighting Thematic Unit

The instructional practices in this study provided a thematic unit for the context of literacy learning. All Units centered around three themes, namely food, health, and technology. Selected reading strategies for comprehension were placed to be taught within the context of the conceptual theme such as goal-setting, comprehension monitoring, evaluation, sensing others' feeling, collaborative work, exchanging explanations. This provided competence support for engaging readers in the ability to comprehend informational texts. In this study, three thematic units on "Food" were designed to highlight local informational texts of the Southern Thailand on the topics of "Spice up your life with Thai chilies, "A Taste of the South," and "Food Culture" in Week 3, 6, and 9 respectively.

Affording Relevance

Relevance is defined as linking books and reading activities to students' personal experiences (Guthrie, Mason-Singh, & Coddington, 2012). In this study, the links to self can be tied to students' cultural experiences such as Thai chilies, southern dishes, and warning labels in Unit 2 (Spice up Your Life with Thai Chilies), Unit 5 (A Taste of the South), Unit 1 (Alcohol Graphic Warning Labeling), Unit 4 (Effectiveness of Pictorial Warning Messages), and Unit 7 (Pictorial Warning Label on Alcoholic Beverage Packages) as well as the links to a personal interest can be applied to students' schemata of a recent personal experience such as social networking in Unit 3 (Pros and Cons of Social Networking Sites), Unit 6 (Is Facebook an Addition?), and Unit 9 (Social Networking and Education). Guthrie, Mason-Singh, and Coddington (2012) also confirmed that the level of relevance was a

starting point for learning the relevance of other texts on other topics in the future.

Emphasizing Importance

This component focused on enhancing the students' values for literacy activities. It was the process of bringing students' attention to the benefits of reading. Generally, a number of students avoided reading because they did not realize that it was important for them now or in the future. With the attempt to situate the importance of reading to the conceptual theme of the teaching unit, the students eventually raised their estimate of the value of reading. Brief tasks increased perceived value and course achievement (Hulleman et al., 2010), and brief explanations by the teacher also heightened perceived text value and enhanced engagement in reading (Jang, 2008). In this particular study, emphasizing the importance of reading could be found in Unit 1 (Alcohol Graphic Warning Labeling), Unit 4 (Effectiveness of Pictorial Warning Messages), and Unit 7 (Pictorial Warning Label on Alcoholic Beverage Packages) where students had to compare warning text messages with pictorial warning messages. In addition, Unit 3 (Pros and Cons of Social Networking Sites), Unit 6 (Is Facebook an Addition?), and Unit 9 (Social Networking and Education) also enhanced students' critical thinking by increasing knowledge of the media, awareness of the influence of media, and the ability to evaluate critically the reliability of the media representation in reality.

Fostering Collaboration

Collaboration is an important social discourse among students in a learning community that enables them to see perspectives and to socially construct knowledge from text (Johnson & Johnson, 2009). Each unit in this research allowed students to work with their partners or group members in exchanging ideas and sharing expertise based on the reading texts. Team projects such as study maps or poster making were also included. In each 90-minute unit, it was arranged for

students to work in whole group, partnerships, and small teams to foster the motivation of pro-social goals for reading. This collaborative reading is particularly interesting from an EFL standpoint because it is very effective with struggling readers (Grabe, 2009). This concept, in turn, influences students' reading achievement, knowledge gained from reading, and the kinds of practices in which they have engaged. For example, in this study, groups of students were required to present their southern chili recipe in Unit 2 (Spice up Your Life with Thai Chilies). In Unit 7 (Pictorial Warning Label on Alcoholic Beverage Packages), they created their pictorial warning message and presented it to the class.

Providing Choices

One of the motivational supports is providing a choice. It truly enables students to develop self-direction in the classroom. The researcher-instructor offered the following kinds of choices within the 10-week period; for instance, student suggestions for strategy use, student input into topics or sequence of topics, options for demonstrating learning from text, and selection of partners or group members. With these mini-choices provided during reading, they led students to feel a strong sense of investment and to commit larger amounts of effort to their reading tasks (McRae & Guthrie, 2009; Zhou, Ma, & Deci, 2009). One of the techniques for offering student choices in the classroom was to encourage the students to choose whether to work independently or in groups. Some students simply preferred not to work with other people; or else, they chose their own partners or group members. During the Communicating to Others phase in Week 2, the students were assigned to design a pictorial warning label on alcohol beverages. In this phase, the students were able to select pictures, texts and design to communicate information to peers.

Enabling Success

This can be the most crucial ingredient for boosting engagement in reading. Using easy reading as an input really

makes texts more comprehensible (Krashen, 2013). It is similar to this instructional construct in that the teacher has enabled success by providing readable texts, selecting reading materials at the students' reading level, and recommending relevant texts of students' interests. Additionally, success must be fostered by the teacher feedback as it guides students to set realistic goals for interaction with text. In this study, the texts were selected and tied up across three themes: food, health, and technology. All the informational texts were suitable for the students' experiences and at their reading level. In Unit 2 (Spice up your Life with Thai Chilies), different kinds of Thai chilies were introduced in order to familiarize the students with the text they were going to read in the following unit. In Unit 5 (A Taste of the South), background knowledge and vocabulary on various types of Thai Chilies could be integrated into other famous southern Thai dishes, such as Kaeng Lueang, Kaeng Tai Pla, and Klua Kling. In Unit 8 (Food Culture), the last unit on the food theme, the students were able to link the previous learned information with its effects on the food culture. This instructional construct fully enabled success in reading engagement and achievement.

In sum, explicit reading instruction allows students to link new materials to their experiences when they are taught where to look for information through personal engagement in each instructional phase. In this practice, the students had an opportunity to make connections with informational texts they were going to read. Finally, they constructed a process or product for sharing the learned information to enhance comprehension and collaboration with peers.

Development of Engaged EFL Readers

The findings of the engagement measurements of the Reading Engagement Index and Reading Engagement Checklist demonstrated that the level of students' reading engagement was slightly higher after experiencing Explicit Reading Instruction. The students developed a stronger sense of self-efficacy and exploited more cognitive strategies according to the post-intervention mean

scores of REI. This finding correlated with the study of Schunk and Zimmerman (2007). They found that instruction enabled students to learn realistic goals setting during reading and students could evaluate their progress increasing self-efficacy and achievement in reading tasks.

From the results of the REI, Item 2 "Reads favorite topics and authors" and Item 3, "Easily distracted in self-selected reading", confirmed that the students' intrinsic motivation was low. The Item 3 was a reverse code; therefore, the result reflected the opposite meaning. The results were similar to the findings in the studies conducted by Guthrie, McRae, and Klauda (2007) and also by Guthrie, Klauda, and Morrison (2012). The studies clearly documented that students' motivation for reading and attitudes toward reading decreased over time. Such declines were likely stronger for readers who struggled with reading.

Motivational-engagement support is really not only important for general academic achievement, but it is also an important predictor of reading comprehension abilities (Taboda et al., 2009; Grabe, 2009; Anderson, 2012; Guthrie & Klauda, 2014). Not surprisingly, according to those studies, the students' English reading abilities and reading engagement in this present study went hand in hand. Besides, disinterest in reading informational text may be one of the factors undermining students' reading motivation. Informational text is often considered more difficult to comprehend because it tends to include more technical vocabulary and to focus less familiar and impersonal topics (Guthrie, Mason-Singh, & Coddington, 2012; Cheng, 2010; Shen, 2013).

Apart from the motivation factor, the results from the two instruments used in the study did not get along well in terms of social engagement. The self-report REI revealed that the students possessed social motivation, but the result was on the opposite side in the Reading Engagement Checklist. There were some factors triggering this obscurity. Firstly, the social engagement in the reading engagement checklist was considered as the quality of the students' responses. Comments or interactions with eagerness

or great enthusiasm were considered as high social engagement. On the contrary, social motivation constructed in the REI was assessed by the level of group discussion enjoyment. Hence, these two instruments portrayed different views of social engagement. The measurement administration might cause this mismatch as McNamara (2011) and Veenman (2011) supported this view in that the students' judgments of their reading behavior and the measurement of their performance often did not match. The self-report questionnaire may be skewed in one direction or another because the students lacked a clear understanding what comprised good versus poor performance. Besides, the students particularly in this study probably guessed answers that might be the most socially desirable or best answers. In addition, in the Thai context, some students are encouraged to avoid 'loss of face' as a result of making mistakes. They are afraid of taking risks and not willing to guess if they do not know the right answer. They remain silent whenever possible or use other means to avoid answering questions. Several early western researchers have noted the tendency for many Asian learners to neither ask questions nor disagree with their teacher in class. From their point of view, Asian learners exhibit shyness, avoidance of uncertainty and risk-taking, preference to listen (rather than speak) to the teacher, and rarely raise their hands to answer the teacher's questions (Liu & Littlewood, 1997; Oxford & Burry-Stock, 1995).

Conclusions and Implications

Explicit Reading Instruction can enhance students' informational text comprehension and reading engagement according to the results of this mixed-methods study. There may be some pedagogical implications for reading educators to address if they plan to utilize this proposed Explicit Reading Instruction. First, content literacy with a focus on the multifaceted components of language, cognitive, strategic and socio-cultural perspectives should be fostered so as to engage the students in classroom practices. Meanwhile, the students should be made accustomed to the process of self- monitoring so that they can

observe and retrieve information with a clear goal. Teaching students to recognize when and how to integrate strategies into reading foreign language materials is highly recommended. Making a causal attribution makes students become aware of their success and failure so that they know how to apply their reading skills and strategies to cope with future reading. Reading engagement in on-line texts for information, for instance, should also be added as today's students have instant access to multiple forms of information through a range of digital media. Reading engagement in informational texts and tasks should be implemented in other contexts as it is, according to previous research, evidently a significant factor for academic reading achievement.

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Appendix A
Reading Engagement Index

Mark × on the number (1-5) according to the extent to which you agree with each statement.

Statement	Very true of me → Not very true of me				
	1	2	3	4	5
1. Often reads independently					
2. Reads favorite topics and authors					
3. Easily distracted in self-selected reading					
4. Works hard in reading					
5. Is a confident reader					
6. Uses comprehension strategies well					
7. Thinks deeply about the content of texts					
8. Enjoys discussing books with peers					

Appendix B

Reading Engagement Checklist

Student's name _____ **Lesson** _____

Date_____

Reading Engagement		**Comments**
Levels	***Affective Engagement***	
1	Displays negative emotion; sighs; looks very bored; prolonged yawn; head completely down on desk	
2	Even expression; head partially down but may still be looking toward teacher/classmates; responds in monotone	
3	Smiling (perhaps just briefly); looks pleased; appears interested; tone suggests some pride/interest	
4	Grins broadly or suddenly; tone suggests great excitement or interest; makes noises (e.g., "ooh") which suggest great interest	
Levels	***Behavioral Engagement***	
1	Distracted by something unrelated to task; head completely down on desk (i.e., not participating in task); teacher has to tell student to get to work; prolonged yawn	
2	Hard to judge whether student is truly behaviorally engaged; not off-task, but does not appear particularly involved; eyes may or not be on teacher, but does not seem to really be following discussion or actively engaged in activity; may be slouching	
3	Clearly on-task, as suggested by eye movement and posture towards speaker; raising hand (perhaps just briefly); writing; speaking; clearly listening (suggesting that student is attentive at least behaviorally)	
4	Waving hand; hand "shoots" into air to answer question; making noises that suggest great enthusiasm and eagerness to participate; otherwise seems "super-engaged"	
Levels	***Cognitive Engagement***	
1	Response reveals student was not paying attention to question or instructions; completely off-task (suggesting that student is not thinking about given task)	

Reading Engagement		**Comments**
2	Hard to judge whether student is truly cognitively engaged; flipping book pages quickly without really looking at any	
3	Raising hand; writing; speaking; provides brief answer (e.g., one or two words); reading; eye movement and posture suggest that student is following along with activity; clearly listening (suggesting that student is processing information)	
4	Response reveals student was thinking very hard; response is extensive (Note: student must speak in order to receive this rating)	
Levels	***Social Engagement*** (based primarily on student-student interactions or situation in which response to teacher is public)	
1	*Teacher* prompts social interaction and students do not respond; student teases, laughs at, or criticizes another	
2	*Teacher* prompts social interaction and interaction that results is minimal; student turns toward classmate that is speaking; student half-raises hand when responses are solicited by the teacher; student is called on without raising hand and responds readily; social interaction not explicitly warranted by current activity and student does not initiate it on his/her own	
3	Students exchange activity-related comments; *students* initiate interaction; *teacher* initiates interaction and student interacts positively and/or with eagerness; student fully extends hand, reflecting desire to share response or unsolicited comments	
4	Similar to 3, but interaction is extended or marked overall by great enthusiasm/intensity	