

An Investigation of Factors affecting English Language Reading Success: A Case Study of an EFL College Reader

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This paper examines variables affecting the English language reading success or failure of a Thai graduate student in the Information Systems Program at a university in the U.S. The participant's self-assessment of his reading, speaking, and listening abilities in Thai was at a good level, although his writing proficiency was lower than that of his other Thai language skills. Based on his TOEFL score, the participant's English proficiency was moderately high. Yet he sought help to improve his reading ability. The participant was given a general questionnaire and a reading questionnaire on metacognitive conceptualizations of his silent reading strategies in both Thai and English. He was then asked to discuss his reading; these discussions were audiotaped during 90-minute tutoring sessions held each week for 2 months. The study reveals that the variables impeding the Thai EFL reader from achieving proficiency in reading English texts are absence of schemata, insufficient knowledge of the target language, self-perception, and reading strategies. The roles of each variable are inter-related and contribute to reading success or failure.

In English as a Foreign Language (EFL) classrooms in Thai universities, it is common to see students looking up vocabulary, reading slowly and getting confused by sophisticated syntax. Many Thai students complain that they spend many hours reading a chapter of a text written in English. Furthermore, it is sad to hear that they cannot get the gist of what they read. They feel too discouraged to continue reading and to seek further information from texts.

Thai students entering universities have had as many as eight

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years of instruction in English. However, their English reading ability is poor. In Seelor's study (1978), the Nelson Denny Reading Test Form A was administered to thirty student teachers of English in a teacher training college. The result shows that their grade equivalent scores ranged from 2.1 to 4.8. Another study conducted by Nilagupta in 1982 also shows that the mean grade equivalent score of the university students in the study was 4.4. These two studies reveal that the English reading ability of many Thai college students is not effective enough to make use of English resources at the college level. These results interested us in finding out more about the variables that impede Thai college students from achieving proficiency in reading English.

Yorio (1971) points out that variables affecting reading problems for foreign language learners are their imperfect knowledge of the target language, such as vocabulary and structure, and interference from their native language. Normally foreign language learners are literate in their native language. Thus, foreign language readers should be able to process their reading in the foreign language in the same way as they do in their native language. Yet, insufficient knowledge of the target language makes their reading process in a foreign language more difficult. These readers cannot anticipate meanings, chunk strings of visual information into meaningful units, and make use of the correct cues effectively. Also, they have to pay close attention to decoding unfamiliar words and structures. This delays their reading process. According to Smith (1985), when readers encounter difficulty in processing text, cognitive resources like short-term memory will be allocated to correct the difficulty. For instance, when readers are unable to comprehend what they are reading, a fix-up strategy such as rereading is allocated. Simultaneously, their short-term memory needs to maintain their understanding of the text. Then, their short-term memory, which has a limited capacity to hold information, is overwhelmed since the readers try to fill short-term memory with too much visual information from the text. In accordance with its nature, the short-term memory clears itself automatically. Consequently, the readers

get lost and cannot proceed with the next item of business. Thus, they face comprehension breakdown.

Another source of reading problems for foreign language (FL) readers, which Yorio (1971) points out, is interference from the native language. Syntactic structures in their first language (L1) make predicting and making meaning more difficult because the syntactic structures in their native language are relatively different from those of the target language. For instance, Thai students find a modifier placed before a noun difficult to understand because, in their native language, nouns precede their modifiers (Nilagupta, 1982). Also, a word has different shades of meaning in different languages. When FL readers overgeneralize meanings of a word that they know in their L1 to a word in the target language, they tend to obtain a distorted meaning.

Nilagupta (1977) also support Yorio's findings. In Nilagupta's study, she administered an English Screening Test, which consists of three subtests—vocabulary, structure and reading comprehension—to 1,278 Thai graduate students from four different majors—Public Administration, Business Administration, Applied Statistics, and Development of Economics. The study reveals that Thai students have difficulty with passive voice, embedding, deletion, nominalization and negative words such as *by no means*, *neither-nor* and *none*.

Tzung-yu (1993) clearly supports Yorio's propositions as well. She states that EFL readers possibly fail in making meaning and comprehending because of insufficient English grammatical knowledge. To illustrate, one of the significant difficulties of Chinese college students in reading technical texts in English is the confusion caused by the relative clause. Dependent clauses and an independent clause are combined in a complicated way, and the dependent clauses interrupt the subject-verb-object sequence of the independent clause. Moreover, the meaning constructed from this pattern is inverted in the Chinese language and often deviant from the intended meaning. Therefore, it is difficult for EFL

readers, specifically EFL Chinese students, to understand texts.

In the aforementioned studies, the researchers tend to hypothesize and assert that a primary variable affecting the reading problems of FL readers is linguistic deficiency. Foreign language readers or second language (L2) readers tend to have inadequate knowledge of the target language to deal with their L2 reading. This hypothesis is more credible now that subsequent research (Goodman, 1971; Coady, 1979; Clarke, 1988; Joanne, 1988; Royer & Carlo, 1991) demonstrates that reading abilities in the first language do transfer to reading in a second language. If so, FL/L2 readers should be able to apply their reading ability in their L1 to reading in the target language. Otherwise, they probably have a language deficiency in the target language.

In addition, Carrell and Eisterhold (1983) propose that schemata could be a variable affecting the reading failure or success of L2 learners. Carrell and Eisterhold explain that there are two distinct types of schemata: content schemata (background knowledge of the content area of texts) and formal schemata (background knowledge of the formal, rhetorical and organizational structures of different types of texts). If readers possess formal schemata, this background knowledge will assist them in anticipating the structure of the text they are reading. For instance, the structure of fables or simple stories consists of characters, development and setting; the rhetorical structures of expository texts are cause and effect, collection, comparison and contrast, and description. Carrell and Eisterhold's (1983) and Slater et al's (1985) studies, conducted with ESL readers at the intermediate level and with ninth-grade native speakers, respectively, corroborate that formal schemata do affect readers' comprehension and recall of what they read.

Carrell and Eisterhold state that the fact that readers cannot comprehend what they read results from their failure to activate appropriate schemata, which may be due to the author's not having sufficient clues available in the text for readers. Another possibility is that readers do not

possess the schemata required and anticipated by the text author.

The set of hypotheses regarding variables affecting the reading problems of FL readers has been expanded by L2 researchers advocating the interactive model of L2 reading (Rumelhart, 1994; Eskey & Grabe, 1988; Eskey, 1988; Carrell & Eisterhold, 1988; Carrell, 1988). According to the interactive model of L2 reading, efficient readers must be able to apply both top-down (knowledge-based processing) and bottom-up (text-based processing) strategies interactively. They should be able to make use of their prior knowledge to make predictions and to construct meanings from texts. To reduce uncertainty in anticipating and sampling and to efficiently enhance their comprehension, readers should be able to apply graphophonic, syntactic and semantic cues. The process of employing bottom-up and top-down strategies must automatically and fluently proceed without consciousness.

The interactive model of L2 reading leads to another hypothesis, namely that the reading problem of L2/FL readers does not result from any single variable. The roles of each component in reading, such as knowledge of the target language, schemata, reading strategies and other variables, are intertwined during the process of reading. Therefore, the interplay of all these variables affects the reading problem of SL/FL readers.

In addition, motivation (Mealey, 1990; Eskey, 1986) and self-perception also influence reading achievement in a second or foreign language (Grant & Adunyarittigun, 1999; Adunyarittigun, & Grant, 2000). Motivation and self-perception influence individuals' overall orientation toward the processes of performing a task, outcome expectation, choice they make, effort expenditure, persistence, and perseverance (Bandura, 1977, 1986; Bandura & Schunk, 1981; Bouffard-Bouchard, 1990; Lent et al., 1984; Schunk & Hanson, 1985; Schunk, 1991). When students perceive themselves to be able readers, they will have high confidence in their capability to perform a reading task, use a wide range of cognitive

and metacognitive strategies (Paris & Oka, 1986; Pintrich & Schrauben, 1992; Schunk, 1985) and view reading as meaning making. They will also be resilient in the face of adversity and remain engaged in constructing meaning and solving problems when facing difficulties (Castle, 1994; Henk & Melnick, 1995). In contrast, students with self-doubt will view a challenging task as a threat to be avoided (Bandura, 1989; Colvin & Kramer Schlosser, 1997/1998). They will work lackadaisically, expend little effort on a challenging reading task (Schunk, 1991) and become frustrated during reading. These students may dwell on their deficiencies, approach a reading situation without a sense of purpose, and fail to monitor reading activities (Johnston & Winograd, 1985). These students either attempt to avoid reading or procrastinate during reading (Vacca & Padak, 1990; Vacca & Vacca, 2002). Therefore, motivation and self-perception are important to reading effort and achievement.

According to these studies, several variables such as linguistic ability in the target language, schemata, and psychological factors affect the reading success or failure of SL/FL readers. With a desire to experience and verify the claims of the studies cited above, I conducted a case study to explore the factors causing reading difficulties for a Thai EFL reader. Also, I propose some forms of remedial instruction to help the participant read better.

Method

Participant

The participant in the study was a thirty-one-year-old graduate student studying in an Information Systems program at a university in the eastern United States. Based on his self-assessment, his listening, speaking and reading proficiency in Thai was good, but his writing proficiency was lower than that of the other skills.

The participant started learning English as a foreign language in the fifth grade in Thailand. Until college level, English had not been the

language of instruction, even in his English class. After receiving a Bachelor of Science in Biology from a public university in Thailand, the participant worked as a sales representative for a medical company. Yet, English was not used for communication at his workplace.

Before going to the U.S., he received tutoring in English to prepare for the Test of English as a Foreign Language (TOEFL). Then he took the TOEFL test (paper-based) and obtained a score of 550. Based on his score, we can assume that his English ability was moderately good in terms of listening, speaking, reading, and writing. The result was congruent with his self-assessment.

Two years after taking the TOEFL, the participant was admitted to and became a graduate student in a Master of Information Systems program at a university in the United States. Attending graduate school in the U.S. was the first time that he encountered the use of English as a language of instruction. Yet it seems that the university was the only place in which the participant used English for communication, since he usually spoke Thai at home.

The participant professed himself to be an unskilled reader in English. Before participating in this research project, he told me that he normally spent at least six to seven hours reading a chapter of his textbook. Even though he tolerated many hours of reading, he could not comprehend what he read. His problem interested me and led me to examine the variables that caused the participant's reading difficulties.

Instruments

Questionnaires Two types of questionnaire were used in this study.

1. General Questionnaire A questionnaire was developed to elicit relevant demographic information from the participant. It was also used to obtain information about the participant's frequency in applying reading strategies during reading as well as about his attitudes toward

reading.

The section of the questionnaire used to elicit information about the participant's frequency in applying reading strategies was adapted from Hahn's survey of reading strategies (1984) and developed based on Knight et al's (1985) and Padron and Waxman's (1988) studies. Using a 1-4 Likert Scale (always, usually, almost never, and never), the participant judged each reading strategy. Items in this section include: (1) three statements pertaining to negative strategies the participant used during reading and (2) twelve statements focusing on positive reading strategies he applied.

The other section of the questionnaire was developed based on McKenna and Kear's Elementary Reading Attitude Survey (1990). It was used to obtain information about the participant's attitudes toward reading. Using a 1-4 Likert Scale (4=happiest, 1=very upset), the participant judged eight statements about his own attitudes towards reading. Items on this section of the questionnaire include: (1) five statements focusing on his attitudes towards recreational reading and (2) three statements pertaining to his attitudes toward academic reading. The raw score of the participant's responses on this particular section was converted into a percentage in order to determine his attitudes toward reading.

2. Questionnaires for Reading A questionnaire was developed to elicit the participant's metacognitive conceptualizations of his silent reading strategies in both Thai and English.

This questionnaire was based on Carrell's Metacognitive Questionnaire (1989). Using a 1-5 Likert Scale (5=strongly agree, 1=strongly disagree), the participant responded to thirty-six statements about silent reading strategies. Items on the questionnaire include: (1) six statements measuring his confidence in his reading abilities, (2) five statements pertaining to what he does when he does not understand something, (3) seventeen statements pertaining to his perception of effective reading

strategies, and (4) eight statements about his perception of what makes texts difficult to read.

This type of questionnaire was used after the participant performed the silent reading and retelling a story. The participant received two questionnaires. One was given after silent reading in Thai; the other was given after silent reading in English.

Miscue Analysis According to Watson and Henson (1991), miscue analysis is a window on the reading process. It provides a view of a reader's strategies, beliefs and comprehension in reading. In this study, miscue analyses were performed in Thai and English. While the participant was reading aloud, such miscues as insertions, omissions, substitutions, mispronunciations and repetitions were coded. Afterwards, the participant retold the story without aids. When the participant could not retell the story, the investigator would provide a few aids or cues to facilitate his retelling. According to Lee (1986), using a second language production task can confound comprehension, so the retelling was done in Thai.

The English short stories selected for the analysis were *Lamb to the Slaughter* and *The Landlady*, both by Roald Dahl. The difficulty levels of the stories based on the Fry Readability formula are approximately at the sixth grade and the seventh grade respectively. The two Thai short stories were *Love, Grief and Hope* and *Rainy Season*, selected from a Thai magazine. These four stories were selected based on Watson and Henson's criteria (1991, pp.53-54) as follows: (1) the story must be a complete text with a beginning, middle, and end; (2) it should be new to the reader; and (3) it must be slightly difficult for the reader.

The two stories read silently were *The Landlady* and *Rainy Season*. The two stories read aloud were *Lamb to the Slaughter* and *Love, Grief and Hope*. While the participant was reading aloud, the investigator was marking miscues. The marking system was based on Goodman and Burke's Reading Miscue Inventory (1972). After the oral reading, the

participant was assigned to retell the story he read. Then, the participant was assigned to read another story silently and retell the story with the same format as he used after the oral reading. Then, his miscues, reading, and retelling were analyzed.

Discourse Analysis In each tutorial session, the participant's explanations of what he understood from a text were audiotaped. The audio-recordings were transcribed into written scripts and analyzed along with the investigator's diary. These written notes and scripts revealed important information that greatly assisted the investigator in understanding how the participant interpreted the text.

Procedures

The investigator gave a 90-minute tutoring session in reading to the participant each week for two months. The discussion between the participant and the investigator and the participant's thinking aloud were audiotaped.

In each tutorial session, the investigator introduced some reading strategies such as PRWR (Preview, Read, Write and Recite), KWL (What do you know?, What do you want to know? And What did you learn?) and making use of graphic organizers to the participant. The participant tried the reading strategies that were introduced, and read and discussed what he comprehended from the text with the investigator.

The participant's explanations of what he understood from reading were audiotaped and transcribed into written scripts. The investigator also recorded his view of the participant's reading in a diary.

On the seventh week of the project, the miscue analysis procedure for English texts was performed. Afterwards, the participant responded to the Questionnaire for Reading in English.

On the eighth week, the miscue analysis procedure for Thai texts was performed. The participant followed the same steps as those for the

English text analysis: doing the oral reading, retelling, doing the silent reading, retelling, and then responding to the Questionnaire for Reading in Thai.

The miscues made during the oral readings in both languages were analyzed to see how the participant made use of the cues of the language and of his reading strategies to process texts. His retellings were analyzed to see whether the participant understood what he read. The Questionnaires for Reading in Thai and in English were analyzed to determine the reading strategies that the participant believed he applied during the silent reading.

On the ninth week, the participant was assigned to respond to a General Questionnaire developed to elicit relevant demographic information from the participant as well as to determine his attitudes toward reading, including his metacognitive awareness of silent reading.

Results and Discussion

Data gathered from the miscue analyses in both languages, the General Questionnaire, the Questionnaires for Reading in Thai and in English, and the investigator's diary, including the written scripts, were analyzed to investigate the variables affecting the participant's reading ability. The results show that the interplay of the following variables impedes the participant from achieving proficiency in reading in English.

1. Schemata availability One possible cause of the participant's failure to comprehend the text is that he does not possess the appropriate schemata or structures of background knowledge required and anticipated by the text author. According to his responses on the General Questionnaire, the participant's previous field of study was Biology, and his previous work experience was as a sales representative of a medical company. His prior knowledge and previous experiences were relatively unrelated to his present field of study, information management systems. While reading, the participant could not make predictions

and inferences or determine and sample significant units of the text because his existing schemata did not contain a framework for learning the content domain of the text. When knowledge-based processing did not work, text-based processing was applied. Thus, the participant attempted to decode the text by means of translating prints into meanings and translating the text from L2 into L1. His decoding was processed unautomatically and engaged the limited cognitive resources, specifically short-term memory. Short-term memory was then overloaded with visual information. Consequently, this process affected the overall quality of his comprehension and interpretation. That is, it caused the participant not only to fail to comprehend but also to misinterpret the meanings of the text.

2. Misconceptions about reading The participant seemed to conceptualize that reading should be either bottom-up processing or top-down processing. This misconception is inclined to be associated with genres of texts by the participant.

When reading a narrative text, the participant conceptualized reading as knowledge-based processing. He engaged exclusively in applying his prior knowledge to make predictions and construct and interpret meanings without supporting evidence from the text. To illustrate, having read *Lamb to the Slaughter*, the participant over-interpreted some important events in the story based on his prior knowledge and assumptions; for instance, (1) Mr. Maloney was murdered because of a business problem (in fact it was because he was planning to divorce his wife); and (2) Sergeant Noonan and Mrs. Maloney had an affair, and planned to kill Mr. Maloney (but in fact, they were just friends; only Mrs. Maloney intentionally killed her husband). These over-interpretations are shown in transcripts 1 and 2. [T = Researcher, S = Participant]

Transcript 1

T: What do you guess about his career?

S: I think he's a businessman.

- T: He's a businessman.
- S: He had a business problem. Another possibility I think is that he might have had a family problem.
- T: He had a family problem.
- S: Formerly, I thought he might have wanted to divorce his wife. But finally, he was murdered, so I don't think that's a cause of the murder.
- T: You think he was killed because ...
- S: It's a business problem.
- T: What made you think that?
- S: I don't know.

Transcript 2

- S: Oh! I think a policeman might have had an affair with Mrs. Maloney since Mrs. Maloney had dinner with him even though her husband had been murdered.
- T: Who might have had an affair with Mrs. Maloney?
- S: I guess Noonan. This's the only one I remember. Oh! I think he had an affair with her because there was a sentence mentioning that Mrs. Maloney knew both of the policemen. And she also had dinner with the policeman after her husband had been murdered. It's weird.
- T: Can you tell me or guess why her husband was killed?
- S: It might have been the business problem. Or if she had an affair with the policeman, they might have planned to kill the guy.

His conception of the reading process changed from knowledge-based processing to text-based processing when he read an expository text. He failed to activate his schemata to facilitate the process of constructing meaning from the text, even though sometimes he might have had the content schemata relevant to the text. In other words, he tended to over-rely on the bottom-up processing referred to as text-boundedness (Carrell, 1983, 1988). For example, the participant could not understand the meanings of "command-driven, character-based user interfaces." Overall he knew the concept of each word, but still could not

construct the intended meaning of each compound word. Had he applied his previous experience of working with simple computer systems, he could have understood the concept of the word (as shown in transcript 3). Furthermore, the participant tended to believe that it was inappropriate to apply his prior knowledge of and previous experience in the content domain of the text to construct meanings (as shown in transcript 4). In other words, he thought meanings were in the text only, so applying his prior knowledge could cause him to misinterpret the meanings in the textbook.

Transcript 3

- T: Look at this sentence. [pointing to the first paragraph] This is interesting. "As the business world came to be dominated by IBM-compatible personal computers, we all became used to command-driven, character-based user interfaces: we simply keyboarded an instruction to the ubiquitous MS-DOS in response to a C> prompt. OBVIOUSLY, not everyone considered this environment 'simple'." Do you get any idea from this?
- S: Well! He is talking about tools. "We all became used to command-driven, character-based user interfaces." I think this sentence is important.
- T: How could we interact with the old computer system?
- S: Oh!
- T: Did you notice the tense of this sentence? [circling the word "came" in the context] It happened.
- S: He said that IBM dominates it. We could interact with the old computer system through a keyboard and C> prompt.
- T: Great! At the C> prompt ... When we interacted with the computer, we worked through a C> prompt. What could we do with the C> prompt? If you get a C> prompt on the screen [drawing a screen with a C> prompt], how can you command it to print?
- S: [Silent] "Keyboard an instruction to"
- T: If I want to print a letter, how can I make the printer print?

S: Do something on the keyboard. We must press some command buttons on the keyboard.

T: OK. Can we command the computer to print from the C> prompt?

S: Yes, we can.

T: OK. What is the command?

S: Print.

Transcript 4

T: It's the link between a personal computer and a local area network.

S: By accident, I have prior knowledge of local area networks.

T: Yes. Very good. You're very clever to apply your prior knowledge.

S: But it's not the solution to my reading problem.

T: Why not?

S: If I had no prior knowledge of this, what would I do? I might have had to learn the database. I think we need to ignore what I have already learned.

Another of his severe misconceptions about reading was that he, as a reader, could succeed in reading without having social interaction. The participant seemed not to believe that having social interaction could enhance the success of his reading and help him clarify his unanswered questions from reading (as shown in transcript 5).

Transcript 5

S: ... I might ask them [his friends] to clarify my questions. But I want to rely on myself as much as I can.

T: I think you should have a chance to talk or discuss what you read with your friends. It might make you understand more of what you read.

S: I want to help myself as much as I can. But ...

3. Insufficient linguistic ability Whether readers can read more or less well depends on the extent to which they perceive the relationship of written English to spoken English. Yet, the participant has minimal control of both spoken and written English, so this negatively

affects his reading. The questionnaires revealed that the participant had limited opportunities to use English for communication both in Thailand and in the U.S. When he studied in Thailand, English was not a language of instruction. After graduating from college, he hardly used English at work. Even while he was studying in the U.S., his use of English was mostly limited to the domain of school. His native language was the only language used in his residence. Thus, there is no question that the participant had little command of spoken English.

Although the participant obtained tutoring in order to prepare for the TOEFL, his English language proficiency—listening, speaking, reading and writing—did not develop much inasmuch as the method of tutoring heavily emphasized test-taking strategies. Furthermore, although his score of 550 on the TOEFL indicates that the participant had moderate proficiency in English, it did not indicate that he had sufficient control of written English. Then, when encountering unfamiliar, sophisticated structures during reading, the participant tended to fail to make meaning; for instance:

A combination of the functional expertise possessed by end-users and the technological competence of MIS specialists, who often assist end-users during systems development, may result in superior systems.

The above sentence has no difficult vocabulary that interferes with the participant's understanding. Yet, he could not understand the overall meaning of the sentence. His explanation reflected his misinterpretation and failure to comprehend the text. Additionally, it was found that the participant's process of making meaning seemed to be blocked by complex structures that are significantly different from Thai language structures. These structures are deletion, embedding, and relative clauses. This finding is congruent with Nilagupta's (1977, 1982).

Moreover, the participant had inadequate knowledge of language mechanics (such as colons, dashes and parentheses) to facilitate his

meaning making, so he failed to make use of these mechanics (as shown in transcript 6).

Transcript 6

T: All right. Then, what are functional categories of personal productivity software?

S: I can't remember.

T: Look at the fourth paragraph.

S: "Several functional categories of personal productivity software..."

T: So you know this paragraph is talking about its categories. Next, do you see a colon in that sentence?

S: Yes. "Data management and analysis"

T: The colon indicates what the categories are.

S: First, data management and analysis. Second, authoring and presentation. Third, activity and notes tracking.

His minimal control of spoken and written language has had an impact on his word recognition ability as well. His miscues generated during the oral reading reflect that the participant did not master the sound-symbol association. To illustrate, he created a lot of nonsense words such as *kanell* (instead of *kneft*), *tanquil* (instead of *tranquil*), etc. This caused the participant to focus on sounding out words instead of gathering information and constructing meaning during the silent reading. Then, his processing of the text was delayed and caused comprehension breakdown.

4. Self-perception The participant's perception of himself as a reader in his native language was different from his perception of himself as a reader in English. When reading in his native language, he perceived himself as an efficient reader and was able to apply cognitive reading strategies that he believed good readers use. His response to the Questionnaire for Reading in Thai reveals that the participant believed that he was able to apply cognitive strategies such as anticipating, making inferences, activating schemata, identifying main points, and being aware

of when he understood or did not understand what he was reading. The response also reflects that the participant was aware of applying those cognitive strategies.

Figure 1

Original Text	Translated Text
Line1: พวกเขาอาศัยอยู่กลางใจเมืองดักกา	We lived in the center of Ducca.
Line2: © บ้านล่าง บ้านเราตั้งอยู่บนลานผืนใหญ่	Our house was located in a big yard.
<p>บ้านเรา = Our house บ้านล่าง = A house located down the hill.</p>	

According to figure 1, miscues made during the oral reading in his first language show that the participant did apply the aforementioned strategies. In the second line, he anticipated the meaning of what was read. The miscue in the second line is graphophonically and syntactically acceptable, but semantically unacceptable. When the meaning constructed did not make sense and was inconsistent with the information obtained in the first line, the participant then applied a fix-up strategy such as rereading to correct the mistake.

His self-perception as an efficient reader in his native language caused him to form an outcome expectancy for the success of his reading. He said, “You know I don’t have any problems if I read this material in Thai.” His perception of himself as an efficient reader led him to a positive effect, self-confidence. Thus, he was not afraid of taking risks in applying such strategies as predicting, sampling, guessing and confirming to make meanings from Thai texts.

When reading an English text, however, the participant was likely to perceive himself as an unskilled reader. The participant often complained that he could not understand what he read and that he could not monitor

his reading as well as he did in Thai. Nevertheless, the results from the Questionnaire for Reading in English that reflect his self-awareness of applying strategies are not consistent with those from his retellings that reflect his comprehension from reading. According to his responses on the Questionnaire for Reading in English, the participant perceived that he had the ability to identify main ideas and apply his prior knowledge to make meaning and had consciousness of when he could understand or could not understand during reading. He also indicated that he applied such repair strategies as rereading either at or before the problematic point and looking up unknown words in a dictionary when he failed to comprehend the text. As shown in his discussion of what he read and his retellings of the story, however, the participant missed many important points and events. Thus, we can assume from these inconsistent results that the fact that the participant formed an outcome expectancy for failure in reading caused him to be unable to employ his reading strategies effectively to facilitate his reading, even though he was aware of applying them. As a result, he could not comprehend the text.

According to McCombs and Whisler's (1989) study, low self-perception leads to a negative attitude and lack of motivation. Yet, this might not be the case for the participant. In his responses to the reading attitude assessment section on the General Questionnaire, he obtained a score of 84.4%. The result indicates that the participant had a strongly positive attitude toward reading either for recreational purposes or for academic purposes. Furthermore, he persevered and tolerated reading for many hours even though he could not comprehend the text.

However, when the participant read English texts, he appeared to have low assurance of his reading competence. He became fearful and stressed. He was not confident in applying reading strategies to process his reading, make meaning and interpret meanings from texts (as shown in transcript 7).

Transcript 7

S: You know, sometimes I'm confused. I am not daring enough to skip some parts while reading. I wonder whether my understanding of what I read is correct. I'm afraid that I might misinterpret the meaning. You know, I don't have any problem if I read the materials in Thai.

Due to his self-perception and low self-confidence, he was inclined to decode prints rather than testing hypotheses and making meaning. He would pay close attention to every single word, viewed words as equally important to the total phrase meaning, and was unable to identify which units of text stored the most information. This affected his short-term memory and resulted in comprehension breakdown.

5. Reading strategies The results obtained from the miscue analyses in Thai and the Questionnaire for Reading in Thai show that the participant is an experienced and proficient reader in his native language. He metacognitively applies cognitive reading strategies to make meaning, including such strategies as predicting, activating his schemata, making use of cuing systems, making inferences, and applying a fix-up strategy—rereading when failing to comprehend texts. The result obtained from the General Questionnaire about his reading strategies in general corroborates that the participant knew some reading strategies and techniques to facilitate his comprehension. These strategies are questioning, making a connection between the text and his prior knowledge, making mental imagery, predicting outcomes, rereading, predicting the teacher's questions, changing his speed of reading, and guessing the meanings of unknown words from context.

Although the participant knew these reading strategies, he could not apply them in reading English texts as effectively as he did in his native language because of such variables as his self-perception in reading English and his self-confidence, as discussed earlier.

In addition, despite the fact that the participant knew some reading

strategies, they were not enough to facilitate his comprehension of the textbook. For instance, he failed to make use of graphic organizers or clues that could assist his understanding (as shown in transcript 8).

Transcript 8

S: Well! I scanned this page, but I don't understand. While scanning, I found GUI... I didn't know what it is. Also I found DOS. What I knew was that the GUI must be relevant to the user interface.

T: OK.

S: Because I tried to read faster, I could not understand the definition of the GUI.

T: Even though you did not get the definition, can you guess what it is?

S: Probably a tool.

T: OK. It's possible.

S: It makes ...

T: What is its role in the computer system?

S: It's a picture, a trackball and mouse ...

T: Did you see an illustration on page 339? The illustration may help us understand the message. Especially, figure ...

S: Figure 9.3. What is it about? While reading, I didn't pay attention to it.

T: An illustration is an important part that can enhance our comprehension. [pointing to the word "figure 9.3" within the context]

S: Yes.

T: Let's look at figure 9.3. "Initial screen on a Macintosh microcomputer, with explanation of its components in five boxes." The caption explains what the illustration is about ...

Discussion

This case study has revealed that the difficulties that impede Thai EFL readers in achieving proficiency in reading comprehension are not restricted to any particular variable such as linguistic ability or reading strategies. The roles of each variable are interrelated and contribute to failure or success in reading comprehension.

Thai EFL readers might not be able to comprehend what they read due to the absence of schemata: content schemata and formal schemata. EFL readers might fail to activate their prior knowledge, even though they have it. It is also possible that they might not have prior knowledge relevant to what they read. Thus, either lacking appropriate prior knowledge or failing to activate it drives EFL readers to over-rely on text processing, which causes reading difficulties for them.

Insufficient knowledge of the target language could be another variable affecting reading success or failure. During the process of reading, if they have inadequate knowledge of language structure and vocabulary, readers might have difficulty in making predictions. Furthermore, when facing more complicated structures that significantly differ from the structure of their own language, such as deletion, embedding, and negation, Thai readers are likely to fail to understand meanings.

Self-perception and self-confidence also affect their success or failure in reading. If they perceive themselves as effective readers, readers will form an outcome expectancy of success, and then their degree of self-confidence in processing reading will increase. It makes the readers able to monitor their reading effectively. In contrast, if they doubt their self-perceived competence, readers will form an outcome expectancy for failure, and they will not be confident in their reading competence.

Reading in the content area requires techniques to facilitate reading. If EFL readers do not know a sufficient number of reading techniques, such as making use of linguistic mechanics, graphic organizers, and annotation to deal with content area reading, it could make the reading comprehension more difficult for them.

Some remedial instructions to resolve the participant's reading problem are suggested.

1. The participant's misconceptions about reading should be clarified. He should be informed that skilled readers trade off between

knowledge-based processing and text-based processing. They activate their schemata to make predictions and to construct meanings from texts. To reduce the uncertainty of anticipating and meaning making, they apply graphophonic, syntactic, and semantic cues. Skilled readers should be able to apply both top-down and bottom-up strategies interactively.

2. To extend his prior knowledge, the participant should be encouraged to do narrow reading (Carrell, 1983) which is confined to a single topic or a single author. Doing narrow reading not only expands his schemata in the field of study but familiarizes him with specialized vocabulary and structure, and with the author's style.

3. The participant should be encouraged to have social interaction with native speakers. Social interaction can be an opportunity for the participant to use his English language skills and expand his English repertoire. It can benefit him not only by extending his linguistic ability but also by clarifying unanswered questions from his readings.

4. Direct instruction in the organizational patterns of expository texts should be provided. Many studies (Meyer, 1979; Meyer & Rice, 1984; Slater et al, 1985; Slater, 1985; Tixier et al, 1984) display the positive effects of instruction in organizational patterns on recall and comprehension. If instruction is provided, it may assist the participant in identifying the central ideas of what is being read and in identifying the logical connections among ideas in the text.

5. The participant should be exposed to complex structures such as negation, embedding, passive voice, deletion and nominalization in context during reading (Nilagupta, 1977).

6. Direct instruction in reading strategies that are essential to reading textbooks should be provided in order to extend his repertoire of strategies to facilitate reading comprehension. The reading strategies and techniques for reading textbooks that should be taught are SQ3R (Survey, Question, Read, Review and Recite), SCROL (Survey the heading, Connect, Read the text, Outline, and Look back), LETME (Linking, Extracting, Transforming, Monitoring and Extending), and text marking

(annotation) (Grant, 1994). The participant should be informed of how, where, and when to apply the reading strategies and should be encouraged to try out the strategies during instruction. The strategies will facilitate the participant's reading, effectively leading to positive effects as well. That is, the participant may rebuild his self-perception as an effective reader in English and his self-confidence. Hopefully, he can become a strategic, independent reader.

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